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R. B. ANDERSON, JR., A. B., M. D.
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166368
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INDEX

The use of the index will be facilitated by remembering that articles are often listed under more than one head. All items of the minutes of the annual session will be found under "Association," auxiliary news under "Auxiliary Notes," books reviewed under "Book Notes," county and district society notes under "Society News," death notices under "Deaths," editorials under "Editorials," and the subject of the editorial, news notes under "News." Original articles will be found under both the name of the author and the subject discussed. Abbreviations are as follows: (E) Editorial; (M) Miscellaneous; (O) Original Article.

A

Page

Acting Secretary of War and Surgeon General Report on Health of the Army (M) 166
Additional Pay Proposed with Medical Badge (M) 216
Allergy, Facts that Should be Known (O) J. H. Black 21
Aluminum-Penicillin Mixtures in Maintenance of Blood Levels of Penicillin, The Use of: I. Intramuscular Injections of Aluminum-Penicillin (O) S. W. Bohls and E. B. M. Cook 249
II. Combination of Delayed Absorption by use of Aluminum-Penicillin and Renal Blockage with Benzoic Acid (O) S. W. Bohls and E. B. M. Cook 342
A. M. A. Broadcasts Resumed December 15 (M) 415
Bureau of Information (E) R. B. Anderson 57
Council Reports (M) 484, 537, 604
House of Delegates (E) Holman Taylor 446
American Medical Association Constructive Medical Care Program (E) R. B. Anderson 557
Anderson, Dr. R. B., Ill (E) Holman Taylor 624
Anemias Aided by Folic Acid (M) 666
Anniversary of the Army Medical Department (M) 217
Annual Session, The 1946 (E) R. B. Anderson 443
Galveston (E) Holman Taylor 619
Local Committees (E) R. B. Anderson 499, 560
No, in Immediate Prospect (E) R. B. Anderson 132
Postponed (E) R. B. Anderson 54
Program and Announcements of the Seventy-Ninth (M) 641
Antivivisection Bill Killed (M) 59
Obstructs Science (M) 28
Approved Surgical Training Plans, Directory of (M) 483
Army Achieves Speedy Expansion of Hospitals (M) 41
Establishes Seven Centers for Tropical Skin Disease (M) 320
Specialized Training Program (M) 482
Army Psychiatric Contributions (M) 668
Artificial Limbs, Six Projects for Improvement (M) 374
Ashworth, C. T. (O) A Clinical and Pathological Study of 170 Ovarian Tumors 525
Ashworth, C. T.: See Gill, A. J., jt. auth.
Assails Examination of Air Pilots (M) 373
Association, State Medical Association of Texas, Membership, June, 1945 112
Auxiliary Notes—
Announcements and Program of the Twenty-Eighth Annual Session (M) 661
Membership, May, 1945 102
Officers 51, 86, 172, 275, 330, 383, 438, 493, 550, 614
Executive Board Meeting, The, San Antonio 87
Transactions of the Called Meeting, May 16, 1945 88
Transactions, September 26, 1945 433
Alexander, Mrs. Charles B. 86
Deaths—
Powell, Mrs. Constance K. 88
Thomas, Mrs. H. C. 615
News—
Bell County 493, 684
Bexar County 438, 550, 684
Bowie County 87
Bowie-Miller Counties 51, 172, 383, 493, 614, 684
Cherokee County 614
Childress-Collingsworth-Hall Counties 684
Dallas County 87, 172, 383, 438, 550
Ector-Midland-Martin-Howard-Andrews-Glasscock Counties 684
Eleventh District 51
Ellis County 438
El Paso County 172, 438, 550, 684
Fourteenth District (North Texas) 551
Galveston County 384, 493, 551, 614

Page

Grayson County 438, 615
Hardin-Tyler Counties 384
Harris County 87, 384, 615, 684
Henderson County 330, 493
Hidalgo-Starr Counties 384, 551
Hopkins-Franklin Counties 87
Hunt-Rockwall-Rains Counties 87, 551, 615, 684
Jefferson County 87, 384
Johnson County 493
Liberty-Chambers Counties 51, 188, 384, 493
Lubbock-Crosby Counties 51, 684
McLennan County 51
Northwest District 494
Tarrant County 438, 494
Taylor-Jones Counties 51, 173, 438, 494, 551, 615
Travis County 275, 439, 551
Twelfth District 615
Tom Green Eight County 384
Washington County 494, 685
Wharton-Jackson-Matagorda-Fort Bend Counties 439
Wichita County 439

B

Back Numbers of the Journal Wanted (E) Holman Taylor 451
Bad Posture Undermines Health (M) 356
Baker Hotel, Mineral Wells, Approved (M) 424
Barrett, J. H. (O) Rhinoplastic Correction of Common Nasal Deformities 315
Barbiturates, The Use of, in Obstetrics (O) R. L. Grogan 28
Battle Injuries of the Urethra with Urinary Fistula (O) T. P. Shearer, T. B. Wiper, and J. M. Miller 137
Bertner, E. W., and Von Pohle, K. C. (O) Vaginoperitoneal Fistula with Chronic Peritonitis following Vaginal Hysterectomy 264
Bertner, E. W. (O) The Future of the Texas Medical Center 625
Black, J. H. (O) Facts that Should be Known About Allergy 21
Black Widow Bite, Treatment of (M) 482
Blood Levels of Penicillin, The Use of Aluminum-Penicillin Mixtures in Maintenance of (O) S. W. Bohls, and E. B. M. Cook 249, 342
Blood Vessel Rupture in Brain (M) 396
Bohls, S. W., and Cook, E. B. M. (O) The Use of Aluminum-Penicillin Mixtures in Maintenance of Blood Levels of Penicillin,
I. Intramuscular Injections of Aluminum-Penicillin 249
II. Combination of Delayed Absorption by Use of Aluminum-Penicillin and Renal Blockage with Benzoic Acid 342
Border Health Conference (M) 140
Bradford, W. L. (O) Recent Advances in the Study of Pertussis 348
Brooksaler, F. (O) Glycogen Storage Disease 210
Brucellosis or Chronic Undulant Fever (O) J. W. Torbett, Sr. 350
Book Notes—
American Proctologic Society, Transactions 552
Arterial Hypertension 385
Bacillary Dysentery, Colitis and Enteritis 495
Bradford and Spurling, The Intervertebral Disc 385
Brown, Technical Methods for the Technician 225
Cancer of the Colon and Rectum 439
Cooper, Arterial Hypertension 385
Council on Pharmacy and Chemistry Reports, Annual Reprint 494
Craig, The Etiology, Diagnosis and Treatment of Amebiasis 83
Diseases of the Nervous System in Infancy, Childhood and Adolescence 275
Diseases of the Thyroid Gland 225

Page

Endocrinology of Woman — 330
Etiology, Diagnosis and Treatment of Amebiasis — 83
Felsen, Bacillary Dysentery, Colitis and Enteritis — 495
Fertility in Men — 173
Fertility in Women — 173
Ford, Diseases of the Nervous System in Infancy, Childhood and Adolescence — 275
Grinker and Spiegel, Men Under Stress — 495
Hamblen, Endocrinology of Woman — 330
Hay Fever Plants — 685
Herrell, Penicillin and other Antibiotic Agents — 495
Herrmann, Synopsis of Diseases of the Heart and Arteries — 331
Hertzler, Diseases of the Thyroid Gland — 225
Hotchkiss, Fertility in Men — 173
Intervertebral Disc — 385
Kolmer, Penicillin Therapy, Including Tyrothricin and other Antibiotic Therapy — 224
McDonough, Poet Physicians — 384
Medical Diagnosis, Applied Physical Diagnosis — 275
Men Under Stress — 494
National Research Council, Neurosurgery and Thoracic Surgery — 83
Neurosurgery and Thoracic Surgery — 83
New and Nonofficial Remedies, 1945 — 494
Noble, Treatment of Peritonitis and its Aftermath — 552
Page and Corcoran, Arterial Hypertension — 385
Painter, Year Book of Industrial and Orthopedic Surgery — 51
Penicillin and other Antibiotic Agents — 495
Penicillin Therapy, Including Tyrothricin and other Antibiotic Therapy — 224
Pinner, Pulmonary Tuberculosis in the Adult — 615
Poet Physicians — 384
Pullen, Medical Diagnosis, Applied Physical Diagnosis — 275
Pulmonary Tuberculosis in the Adult — 615
Psychiatry in Modern Warfare — 439
Rankin and Graham, Cancer of the Colon and Rectum — 439
Siegler, Fertility in Women — 173
Strecker and Appel, Psychiatry in Modern Warfare — 439
Synopsis of Diseases of the Heart and Arteries — 331
Technical Methods for the Technician — 225
Treatment of Peritonitis and its Aftermath — 552
Wodehouse, Hay Fever Plants — 685
Year Book of Industrial and Orthopedic Surgery — 51
Abstracts:
Clinical Action of Penicillin on the Uterus — 277
Comparison of Gonococcus Cultures Read at 24 and 48 Hours — 496
Economic Cost of Paresis in United States — 276
Effect of Treated Acquired Syphilis in Life Expectancy — 685
Experiment in the Psychiatric Treatment of Promiscuous Girls — 385
Frequency of Positive Serologic Tests for Syphilis — 440
Mortality Trends for Syphilis — 685
Possibility of Predicting the Future Needs in Venereal Disease Control — 440
Regarding the Unusual Effect of Penicillin Therapy upon the Uterus — 616
State and Territorial Health Officers Consider Problem — 276
Synergistic Action of Penicillin and Mapharsen — 615
Syphilis among Civilians during World War II — 553
Treatment of Gonorrhea with Penicillin — 496
Treatment of Granuloma Inguinale with Diramin: A New Antimonial — 495

C

Cancer Control in Texas (E) R. B. Anderson — 562
Cancer, Physical Factors in (O) W. A. Selle — 197
Cancer of the Cervix and Endometrium and the Incidence in a Metropolitan City of Texas, Facts and Figures on (O) T. R. Hannon — 186
Carcinoma of the Cervix Based upon Clinical and Cellular Classification (O) J. D. Weaver — 191

Page

Carcinoma of the Vulva (O) O. W. English and E. L. Hunt — 16
Causes of Economic Blindness in Texas (O) J. A. Crockett — 519
Caution Public Against Cancer (M) — 76
Central Agency to Serve Physically Handicapped (M) — 454
Cervix that will not Dilate? (O) J. McIver — 72
Chapel, J. P.: See Park, J. H., Jr., jt. auth.
Chinese Appeal for Medical Personnel (M) — 321
Clinical and Pathological Conference, Faculty in Pediatrics, Medicine, and Pathology, University of Texas School of Medicine, Galveston, Texas (M) — 531
Coarctation of the Aorta, Patent Ductus Arteriosus and Interventricular Septal Defect (O) I. D. Fagin, W. L. Sheperd, and A. T. Morrison — 515
Colchicine for Leukemia (M) — 321
Colon, Injury to, from Air Hose Inflation (O) R. J. White — 406
Coming Meetings and Clinics — 41, 75, 164, 216, 266, 320, 367, 423, 479, 535, 597, 665
Commendation for Army Medical Library Translation Service (M) — 367
Commission of Hospital Care Report (M) — 667
Communicable Diseases, Practical Public Health Procedures in the Control of some of the More Common (O) E. W. Prothro — 35
Congress of Medical Education (M) — 482
Control of Rabies in Dogs (M) — 168
Cook, E. B. M.: See Bohls, S. W., jt. auth.
Coole, W. A. (O) A Concept of the Etiology and Control of Polio and Its Complications—Infantile Paralysis — 203
Cooper, E. E. (O) The Use of Thiouracil in the Treatment of Hyperthyroidism — 254
Correction Doctors Singleton and Knight Article May Journal (E) R. B. Anderson — 58
Corrections (E) R. B. Anderson — 562
Coulter, W. W., Jr. (O) Pleural Mesothelioma, with Report of a Case Presenting some Unusual Aspects — 353
Coulter, W. W., Jr.: See Thompson, S. E. jt. auth.
County Medical Society Library Building Fund (E) Holman Taylor — 622
County Society Reports are Due April 1 (E) Holman Taylor — 563
Crockett, J. A. (O) Causes of Economic Blindness in Texas — 519
Cytological Study of Nipple Secretions (O) D. Jackson and A. O. Severance — 512
Current Editorial Comment—
Cannon, W. B. (1871-1945) Physiologist and Physician, E. L. Porter — 563
Chemotherapy in Tuberculosis, A. Goth — 339
Congenital Heart Disease, G. M. Jones — 624
Demerol, D. Slaughter — 181
Electrocardiography, The Limitation of, W. Sensenhach — 395
Hay Fever and Sinus Disorder, Chauncey D. Leake — 287
Microfilm for Hospital Records, J. Scott — 230
New Concepts of Morphine Analgesia, D. Slaughter — 58
Physical Medicine Looks Ahead, W. A. Selle — 134
Physiology and American Medicine, Chauncey D. Leake — 182
Preparation of Potent Rh Antiserum, J. M. Hill and Sol Haberman — 3
Psychologic Health in Children, J. G. Young — 505
Sulfonamides in Colonic Surgery, E. J. Poth — 451
Treatment of Virus Diseases, S. E. Sulkin — 5

D

Dallas Southern Clinical Society (E) R. B. Anderson — 503
DDT Studied for Outdoor Use (M) — 77
Facts on Use of (M) — 372
Deaths—
Allen, George W., Jr. — 553
Anthony, E. Y. — 616
Austin, Holcombe McRae — 554
Ballard, Arthur E. — 83
Bartlett, Glenn, Sr. — 386
Bass, Thomas Bridgers — 554
Beech, George Delos — 278
Bellamy, Charles Howard — 556
Biscoe, Pat — 440
Block, Cecil — 556
Burton, E. L. — 616

Page

Clements, Stanley Curtis 52
Cooper, Covert Ballejo 225
Crook, Lee Franklin 174
Crumpler, Walter Emmett 52
Curby, Theodore R. 226
Curry, Tom Green 686
Daughety, Jewel 277
Dunnam, Thomas Eugene 387
Edwards, L. L. 617
Erwin, John Henry 441
Etter, William Floyd 175
Foster, Robert Trimble 84
Fowler, Clarence Frederick 280
Frazier, John R. 226
Fuquay, Zack Cleveland 555
Furman, John M. 84
Gilbert, George Horace 52
Gober, Olin Farris 687
Gooch, Frank Branch 441
Graves, Joseph Henry 686
Hale, Richard Alexander 174
Hambright, Judge Gaut 333
Hancock, Ernest Albert 687
Hardin, Dexter H. 556
Hargrave, R. L. 618
Honea, Thomas Carlton 687
Jackson, John Dee 555
James, A. Judson 334
Jeter, Thomas M. 387
Jones, John Housand Bush 686
Kenney, John Wesley 279
Keyes, Claude T. 85
Kleberg, Walter 498
Lewis, George L. 85
Livingston, Joseph Jerome 496
Long, William Frank 331
Lovelace, Jefferson Davis 556
Loving, Joseph Henry 688
Lumpkin, Capt. Samuel Hugh 333
Macune, John William 83
Manney, John Edwin 334
Mathews, Claude A. 85
Mathews, Walter J. 498
McDonald, John Francis 497
McKean, Rogers William 442
Morris, Edwin T. 688
O'Farrell, John Mark 175
Ogilvie, Henry Houston 279
Parsons, William Henry 176
Price, Luke William 332
Purdie, Robert McNair 86
Rentfro, James Linton 496
Roddy, Louis Hyman 332
Rosebrough, Frank H. 387
Russ, Stirling Everett 617
Russell, Buford A. 441
Sewell, J. H. 618
Stafford, John Brooks 332
Stanfield, John Adams 442
Strube, Lt. William E. 331
Sutton, Dewey 174
Swan, H. Arthur 497
Swindell, John W. 226
Terrill, James Joshua 442
Turner, Stephen Thomas 388
Usry, Raleigh Sims 176
Watts, George Graham 278
Weaver, Glenn Shellhorn 388
Weems, Marcus Aurelius 555
White, Adair W. 686
Wickens, Billy True 618
York, John Bohan 280
Deaths from Diphtheria Unnecessary (M) 422
Decherd, G. M., Jr.: See Lefeber, E. J., jt. auth.
Dernehl, C. U., and Nau, C. A. (O) Field Practice in Preventive Medicine for Medical Students 632

Page

Detecting Contamination by Chemical Warfare Agents (M) 41
Diagnostic Problem, An Interesting (O) S. E. Thompson and W. W. Coulter, Jr. 157
Diabetes Mellitus, Nephrotic Edema in (O) E. J. Lefeber and G. M. Decherd, Jr. 506
Dieto-Metabolic Urology (O) P. R. Stalnaker 241
Diphtheria in Europe (M) 483
Disease of the Liver, Reversible and Irreversible, with Reference to the Effect of Choline (O) G. R. Herrmann and P. A. Rockwell 288
Diverticulitis of the Colon (O) J. G. Kerr 18
Dock, W. (O) Organic Lesions Resulting from Emotional Stress 398
Dues Are Due (E) Holman Taylor 503
Not Too Late to Pay (E) Holman Taylor 622

E

Ear, Nose and Throat Infection (M) 537
Easier Access to Public Buildings Urged for Handicapped Persons (M) 373
Editorials—
American Medical Association Constructive Medical Care Program, R. B. Anderson 557
Bureau of Information, R. B. Anderson 57
House of Delegates, Holman Taylor 446
Anderson, Dr. R. B., Ill, Holman Taylor 624
Annual Session, the 1946, R. B. Anderson 443
Changes in 1946 Section Officers, R. B. Anderson 500
Galveston Annual Session, Holman Taylor 619
Hotel Reservations, R. B. Anderson 560
Local Committees, R. B. Anderson 499
No, in Immediate Prospect, Holman Taylor 132
Postponed, R. B. Anderson 54
Back Numbers of the Journal Wanted, Holman Taylor 451
Cancer Control in Texas, R. B. Anderson 562
Correction Doctors Singleton and Knight Article May Journal, R. B. Anderson 58
Corrections, R. B. Anderson 562
County Society Reports are Due April 1, Holman Taylor 563
County Medical Society Library Building Fund, Holman Taylor 622
Dallas Southern Clinical Society, R. B. Anderson 503
Dues Are Due, Holman Taylor 503
Not Too Late to Pay, Holman Taylor 622
Graduate Medical Training, Postwar, Holman Taylor 55
Hill-Burton Hospital Construction Bill, Holman Taylor 337
Hospital Cooperatives, The Problem of, R. B. Anderson 559
House of Delegates, A Called Meeting of, Holman Taylor 394
Judson L. Taylor Foundation, R. B. Anderson 230
Laboratory Medicine in Texas, Raising the Standards of, R. B. Anderson 445
Legislature Has Adjourned, Holman Taylor 130
Library Endowment Fund, Additional Donations to, R. B. Anderson 3
Another Donation, R. B. Anderson 230
Donation Acknowledgements, R. B. Anderson 58
Receives War Bond, R. B. Anderson 132
"Maternal and Child Welfare Act of 1945," Holman Taylor 335
Medical Care, A Constructive Program for, Holman Taylor 177
of Veterans, R. B. Anderson 444
Medical and Public Health Legislation, Present Status of Cult, Holman Taylor 1
Medical Officers, Information Bulletin for, Holman Taylor 180
Returning, Malpractice Liability of, Holman Taylor 286
Returning to Texas, R. B. Anderson 338
Service in Appreciation of Returning, R. B. Anderson 227
Membership, Our, on May First This Year, Holman Taylor 2
Motion Picture Library, New Film for, R. B. Anderson 3, 287
National Health Program, President Truman's, R. B. Anderson 389

Page

Oklahoma City Clinical Society, Holman Taylor 339
Penicillin Research Center, R. B. Anderson 133
Russ, Dr. Stirling E., R. B. Anderson 562
"Socialize Everything or Nothing," Holman Taylor 502
Socialized Medicine, Present Status of the National Effort, R. B. Anderson 500
Radio Talks Available, R. B. Anderson 338
Speakers Bureau Formed to again Combat, R. B. Anderson 228
Southern Medical Association Meeting, Holman Taylor 285
State Board of Health Advisory Council, R. B. Anderson 393
State Medical Association Administration, R. B. Anderson 1
Texas Child Health Council, Holman Taylor 229
Texas Hospital Intern and Resident Staffs, R. B. Anderson 392
Texas Hospitals and Public Health Facilities, Survey of, R. B. Anderson 559
University of Texas Postgraduate Courses, R. B. Anderson 230
H. E. Cunningham 504
Victory Loan Drive, Holman Taylor 281
Volume XLI Closes, Holman Taylor 624
Wagner-Murray-Dingell Bill, The 1945 Version, R. B. Anderson 53
Confusion Regarding, R. B. Anderson 561
Determined Opposition to, R. B. Anderson 129
Texas Newspapers and the 1945 Version of, R. B. Anderson 179
The New, R. B. Anderson 390
Views of Texas Congressmen on 1945 Version, R. B. Anderson 282, 391
War Loan Drive, The Seventh, Holman Taylor 2
Eggers, G. W. N. (O) An Important Foot Fault 140
Endometriosis (O) A. O. Severance 310
England's Birth Rate Increases (M) 216
English, O. W., and Hunt, E. L. (O) Carcinoma of the Vulva 16
Evacuation of Military Patients from Europe (M) 270
Evaluation of Poliomyelitis Therapy (M) 76

F

Fagin, I. D., Shepeard, W. L., and Morrison, A. T. (O) Coarctation of the Aorta, Patent Ductus Arteriosus and Interventricular Septal Defect 515
"Faith and Guts" (M) 76
Feeding Stomach Ulcer Patients at Night (M) 599
Feeding Trends in Pediatrics (O) P. E. Luecke 24
Fetal Death, Preventable (O) J. G. Sinclair 359
Fibrosis of the Pancreas and Its Relation to Chronic Nutritional Disturbance and Pancreatic Achylia (O) D. W. Freeman 69
Field Practice in Preventive Medicine for Medical Students (O) C. U. Dernehl and C. A. Nau 632
Fleming, P. D. (O) Hay Fever—Fact and Fiction 628
Fluorescent Light is not Harmful (M) 420
Foot, An Important Fault (O) Eggers, G. W. N. 140
Fractures of the Forearm, Anatomical and Mechanical Aspects of Treatment of (O) W. G. Stuck 232
Franks, G. P. (O) The Venereal Disease Conference 261
Freeman, D. W. (O) Fibrosis of the Pancreas and Its Relation to Chronic Nutritional Disturbance and Pancreatic Achylia 69
Front Line Psychiatry Effective (M) 270

G

Galveston Extends a Welcome (O) L. E. Herz 636
Gill, A. J., and Ashworth, C. T. (O) Malignant Epithelial Tumors in Young Age Groups 39
Gilmore, C. E. (O) Growth, Thyroid and Dental Caries 306
Glycogen Storage Disease (O) F. Brooksaler 210
Goiter Prevention (M) 511
Governing a Health Unit: Organization, Activities and Plans for Future Housing (O) E. Langford 475
Graduate Medical Training, Postwar (E) Holman Taylor 55
Gray, C. A. (O) Venereal Disease Control in Camp Bowie 213
Grogan, R. L. (O) The Use of Barbiturates in Obstetrics 28

Page

Grollman, A. (O) The Experimental Basis for the Pathogenesis of Renal Hypertension 304
Growth, Thyroid and Dental Caries (O) C. E. Gilmore 306

H

Hacker, G. L. (O) A Survey of Tuberculosis Observed at Freeman Clinic from 1934 to 1944 and Related Statistics 410
Hanks, R. J. (O) Nebulized Penicillin in the Treatment of Respiratory Infections 253
Hannon, T. R. (O) Cancer of the Cervix and Endometrium and the Incidence of these Diseases in a Metropolitan City of Texas, Facts and Figures on 186
Hansen, A. E.: See Wilkinson, E. E., jt auth.
Harkins, J. E. (O) Veratrum Viride in the Treatment of Preeclampsia, Eclampsia, and other Hypertensive Syndromes of Pregnancy 143
Harris, A. W. (O) Some Problems in Rheumatic Fever 62
Harrison, T. R. (O) The Evaluation of Palpitation 452
Hay Fever—Fact and Fiction (O) P. D. Fleming 628
Health Conditions in China (M) 252
Health Conditions in Holland (M) 165, 287
Heart Injuries with Report on Three Cases (O) C. D. Reece 151
Heart Rest at Sea Level (M) 249
Hendricks, C. M. (O) The Treatment of Minimal Lesions 344
Herrmann, G. R., and Rockwell, P. A. (O) Reversible and Irreversible Disease of the Liver, with Reference to the Effect of Choline 288
Herz, L. E. (O) Galveston Extends a Welcome 636
Hill-Burton Hospital Construction Bill (E) Holman Taylor 337
Hospital Cooperatives, The Problem of (E) R. B. Anderson 559
Hospitals Needing Interns and Residents (M) 41, 75, 165, 217, 271, 324, 372, 423, 484, 536, 600, 665
Hospitals Released by Army (M) 482
House of Delegates, A Called Meeting of (E) Holman Taylor 394
Human Bites and Tooth Injuries (M) 24
Human Encephalitis Due to the Western Equine Encephalomyelitis Virus (O) S. E. Sulkin 455
Hunt, E. L.: See English, O. W., jt. auth.
Hypertension, Renal, The Experimental Basis for the Pathogenesis and Treatment of (O) A. Grollman 304
Hyperthyroidism Treatment (M) 482

I

Immunization Program, Planning a Routine (O) W. R. Ross 365
Incidence of Perforated Ulcer Low (M) 182
Infantile Paralysis—A Concept of the Etiology and Control of Polio and Its Complication (O) W. A. Coole 203
Infectious Colon Diseases (M) 514
Is Immunity to Pneumonia Possible (M) 216

J

Jackson, A. E. (O) The Present Status of the Tuberculous Eye 161
Jackson, D., and Severance, A. O. (O) Cytological Study of Nipple Secretions 512
Johnston, R. A. (O) The Care of the Premature Infant from an Obstetrical Standpoint 5
Judson L. Taylor Foundation (E) R. B. Anderson 230

K

Kerosene Poisoning (O) O. W. Lowery 259
Kerr, J. G. (O) Diverticulitis of the Colon 18
Kimbro, R. W. (O) A Report of 100 Cases of Rheumatic Fever in Young Adults 296
Kirk, General, Reports on Malaria Effects (M) 165
Knight, M. D.: See Singleton, A. O., jt. auth.

L

LaBarge, O. J. (O) Virus Disease of the Respiratory Tract 244
Laboratory Medicine, Important Recent Developments in (O) A. E. Rhoden 207
Laboratory Medicine in Texas, Raising the Standards of (E) R. B. Anderson 445
Langford, E. (O) Governing a Health Unit: Organization, Activities and Plans for Future Housing 475
Lee, Q. B.: See Reagan, J. R., jt. auth.
Lefeber, E. J., and Decherd, G. M., Jr. (O) Nephrotic Edema in Diabetes Mellitus 506

Page

Legislature has Adjourned (E) Holman Taylor 130
Leinfelder, P. J. (O) The Diagnosis and Treatment of Ocular Neuroses 414
Library Building Fund, County Medical Society (E) Holman Taylor 622
Library Endowment Funds, Additional Donations to (E) R. B. Anderson 3
Another Donation (E) R. B. Anderson 230
Donation Acknowledgements (E) R. B. Anderson 58
Receives War Bond (E) R. B. Anderson 132
Library Notes 42, 78, 169, 218, 271, 323, 375, 424, 487, 540, 606, 674
Lindahl, W. W., Ritota, M. C., and Metzger, T. B. (O) Tularemia 404
Lobectomy and Pneumonectomy for Pulmonary Tuberculosis (O) A. O. Singleton and M. D. Knight 10
Love, A. C. (O) Vital Statistics in Public Health 473
Lowery, O. W. (O) Kerosene Poisoning 259
Luecke, P. E. (O) Feeding Trends in Pediatrics 24
Lull, Major General, Keynotes "Medics" 170th Anniversary (M) 270
Lymphosarcoma with Primary Manifestations in the Gastro-Intestinal Tract (O) R. D. Moreton 458

M

Malaria Epidemic, Danger Decreasing (M) 533
Malaria Fakes Syphilis Reactions (M) 423
Malaria in Greece (M) 269
Malignant Disease, Incurable, the Palliative Treatment of (O) J. R. Maxfield, Jr. 195
"Maternal and Child Welfare Act of 1945, The" (E) Holman Taylor 335
Maternal Overprotection in Young Children (O) C. S. E. Touzel 524
Maxfield, J R., Jr. (O) The Palliative Treatment of Incurable Malignant Disease 195
Maxillo-Facial Injuries (M) 74
McAllister, W. W. (O) Socialized Medicine and Its Pay Roll Taxation 340
McDonald, C. C. (O) Parathyroid Adenoma of the Anterior Mediastinum 468
McIver, J. (O) The Cervix that Will Not Dilate? 72
Medical Care, A Constructive Program for (E) Holman Taylor 177
of Veterans (E) R. B. Anderson 444
Medical Education, New York Governor Upholds (M) 156
Medical Officer Point System for Discharges Announced (M) 267
Medical Officers, Information Bulletin for (E) Holman Taylor 180
Medical Officers Returning to Texas (E) R. B. Anderson 338
(M) 368, 421, 480, 534, 598, 664
Malpractice Liability (E) Holman Taylor 286
Office Shortage for (M) 372
Service in Appreciation of (E) R. B. Anderson 227
Medical and Public Health Legislation, Present Status of Cult (E) Holman Taylor 1
Medical and Surgical Relief Committee Appeals for Books (M) 218
Medical Seminar (M) 217
Medico-Legal Conference and Seminar (M) 151
Melanoma, Intra-Ocular (O) C. P. Schenck 31
Membership, Our, on May First This Year (E) Holman Taylor 2
State Medical Association of Texas, June, 1945 145
Mengert, W. F. (O) Physiologic Approach to the Problem of Oophorectomy 465
Meningococcemia, Acute, without Meningitis (O) J. H. Park, Jr., and J. P. Chapel 471
Metzger, T. B.: See Lindahl, W. W., jt. auth.
Michigan Voluntary Medical Service Plan (M) 166
Miller, J. M.: See Shearer, T. P., jt. auth.
Minimal Lesions, The Treatment of (O) C. M. Hendricks 344
Misinterpretation Placed on Council Action on Margarine (M) 76
Moreton, R. D. (O) Lymphosarcoma, with Primary Manifestations in the Gastro-Intestinal Tract 458

Page

Mortality of Physicians up, 1945 (M) 600
Morrison, A. T.: See Fagin I. D., jt. auth.
Motion Picture Lending Library 42, 78, 169, 219, 271, 323, 376, 425, 487, 541, 607, 674
New Film for (E) R. B. Anderson 3, 287
New Films for (M) 217
Musacchio, F. A. (O) Typhus Control, A Border Public Health Problem 361

N

National Health Program, President Truman's (E) R. B. Anderson 389
National Infantile Paralysis Funds (M) 300
National Society to Aid Animal Experimentation (M) 668
Nau, C. A.: See C. U. Dernehl, jt. auth.
Neuropsychiatric Discharges in the Army (M) 375
New Films for the Library (M) 217, 667
New Method of Treating Migraine (M) 77
News—
AAF South Central Medical District Meeting 79
Additional Funds for Houston's Health Department 488
A. M. A. Prepayment Medical Care Plan and National Health Program 603
American Association for the Study of Goiter 602
American Association of Obstetricians, Gynecologists, and Abdominal Surgeons Foundation Prize 602
American Board of Obstetrics and Gynecology 79, 666
American Board of Ophthalmology 41, 484, 602
American College of Chest Physicians Examinations 41, 666
American College of Physicians 484
Course in General Medicine at University of Texas 601
American College of Surgeons, Sectional Meetings 536
American Congress of Physical Medicine 171
American Optical Company, Educational Campaign 80
Wins Army-Navy Production Award 221
American Physicians Literary Guild 675
American Public Health Association Meeting 602
Angelina County Health Unit 676
Anti-Rh Type Blood Serum, The World's Largest Supply 377
Art Exhibit on Army Medicine 601
Ashburn General Hospital (McKinney) 542
Awards for Fertility Research and Maternity Care 220
Baylor University College of Medicine 325
378, 489, 542, 609, 677
Building Construction 79
Commencement Exercises 272
Bequest to the El Paso County Medical Society 324
Births 80
Blood Test Campaign in San Antonio 675
Cancer Committee, Statewide 44
Central Texas Health Unit Annual Report 273
Chicago Clinical Conference 542
Child Health Conference 79
City-County Tuberculosis Hospital of Laredo 487
City Physician for Corpus Christi 426
Concentration of all Army Medical Training Facilities at Fort Sam Houston 487
Contest for Physician-Artists 376
Council on Scientific Work 607
Dallas Clinical Conference 376
Dallas County Medical Plan of Prepaid Medical Care 608
Dallas Health 488
Dallas Medical Service Plan to Expand 43
Dallas Medical Supervisory Council 78
Dallas Physicians Mexican Guests 78
Dallas Southern Clinical Society 675
Dallas Venereal Disease Reports 219
DDT Used at Stratford 426
Denton Crippled Children's Clinic 426
Dinner Honoring Dr. H. F. Connally 376
Diplomates National Board of Medical Examiners 426
Donations to Dr. James L. Rentfro Memorial 608
E. M. I. C. Program 271
Establishment of a Blood Bank at Houston 608
Establishment of a Lufkin-Angelina County Health Unit 608
Federal Aid for Hospital Construction 488

Page

Fire Destroyed the Waskom State Line Clinic 542
Fellowships for Physical Therapy Technicians 44
Fort Sam Houston Medical Center 601
Fort Worth Eye, Ear, Nose and Throat Society 169, 427
Fort Worth Food Handling School 542
Four Hospitals Chartered 425
Gastroenterology Award 537
Grayson County Auxiliary Members Honored 219
Harmon General Hospital, Longview, Tropical Disease Center 77
Health Survey by Women's Clubs 425
Hendrick Memorial Hospital, Abilene 542
Hogg Foundation for Mental Hygiene 428
Honor was Paid the Medical Profession 541
Hospital Equipment for Europe 669
Hospital at Columbus 426
Hospital for Henrietta and Clay County 271
Hospital News 607
Hospitals and Clinics 675
Hotel Dieu Hospital, El Paso 542
Houston Health Center 427
Houston Infant Mortality Rate 43
Houston Society for Internal Medicine 609
Inter-American Congress of Radiology (M) 666
International College of Surgeons 376
Journal Club of Waco 426, 676
Judson L. Taylor Foundation 542
Kentucky Plan for Rural Physicians 607
Lederle Laboratories, Inc., Radio Program 327
Long-Sneed Clinic Building 324
Lubbock Crippled Children's Clinic 324
Lubbock Junior Welfare League's Well Baby Clinic 675
Lubbock Memorial Hospital 377
Marriages 172, 221, 274, 328, 380, 430, 490, 544, 678
McCloskey General Hospital Staff 169
McCloskey Hospital Closes 602
Medical Art Degrees 272
Menninger Foundation 542
Million Book Medical Library Goal 43
Mobile X-Ray Unit at Gatesville 426
More Office Space for Dallas Physicians 488
National Arthritis Research Foundation 603
National Physicians Committee Active 79
New Doctors Office Building for Houston 542
New Hospitals 488
New Hospital Planned for Houston 219
New Indigent Sick Program for Tom Green County 43
New Medical and Hospital Buildings for Houston 170
New Orleans Graduate Medical Assembly 536
New Surgical and Medical Plan for Texas 170
News Letter of the State Heart Association 168
Norsworthy Bequest to Houston Hospital 326
Occupational Therapy Lectures 377
Ogilvie, Dr. Henry Houston 487
Ophthalmologic Examination Postponed 273
Ophthalmo-Otolaryngological Conference 427
Osteopaths and the G. I. Baby Act 220
Parkland Hospital Women's Auxiliary 675
Pediatric Postgraduate Program 170
Pediatrics, Talks on 377
Personals 45, 80, 171, 221, 273, 328, 380, 430, 490, 544, 610
Personals, Military 45, 80, 171, 221, 273, 327, 378, 428, 544, 610
Philips Clinic and Hospital, Greenville 541
Physicians Art Contest and Exhibition 537
Polio Research Committee Formed 169
Port Arthur Medical Arts Building 675
Postgraduate Assembly of Negro Physicians 676
Postgraduate Courses Southwestern Medical College 219
Program for Placing Pediatricians 607
Psychiatry Seminar 376
Public Health Schools to be Accredited 327
Randolph Field Army Air Forces School of Aviation Medicine 327
Red Cross Advisory Board 536

Page

Reorganization of the Medical Staff at Baylor University Hospital 609
San Antonio Health 426
San Antonio Hospitals Merged 220
San Antonio Medical Center 488
Sarah Cartmell Memorial Hospital 324
School of Medical Technology 327
Short Course of Instruction on Murine Typhus Control 326
Society for Experimental Biology and Medicine 427
Southeastern Surgical Congress 537
Southern Medical and Hospital Service "Doctor's Plan" 43
Southwestern Medical College News 272, 325, 427, 490, 542, 609
Southwestern Medical Foundation 378
Open House 220
Public Health Lectures 79
Southwestern Section of the Society of Experimental Biology and Medicine 219
Space for Doctor's Offices in Beaumont 488
Special Training for Eighth Service Command Medical Officers 220
State Board of Medical Examiners Examinations 76
Texas Association of Obstetricians and Gynecologists Meeting 423
Texas Branch, Society of American Bacteriologists 490
Texas Branch of the American Legion, Advisory Board to 43
Texas Chapter Alpha Omega Alpha Initiation and Banquet 79
Texas Child Health Council 326
Texas Eclectic Medical Association 427
Texas Club of Internists 424, 666
Texas Hospital Association 43, 600
Texas Hospital Survey Advisory Council 325
Texas Medical Center 427, 489, 676
Texas Ophthalmological and Otolaryngological Society 536
Texas Radiological Society 600
Texas Society for Mental Hygiene (M) 665
Texas Society of Medical Technologists 600
Texas Society of Pathologists 600
Texas Surgical Society 44, 377, 607
Tornado at Nacogdoches 608
Tuberculosis Hospital for Smith County 541
Tuberculosis Testing Program in Highland Park Schools 608
Tumor Seminar 426
Typhus Control 324
in Brown County 377
in San Antonio 377
U. S.-Mexico Border Public Health Association 169
University of Texas Pediatric Fellowships 75
University of Texas Medical School News 44, 79, 170, 220, 272, 325, 378, 427, 489, 543, 609, 677
Undulant Fever in Camp County 541
Upshur County Health Unit 608
Urology Award 537
Venereal Disease in Bexar County 426
Wichita General Hospital Staff 219
Winthrop Chemical Company Expands 376
Wolfe City Hospital 425
World's Largest Supply of Anti-Rh Type Blood Serum 377
Nutrition Report on Civilian Internees of Jap Prison (M) 309
Nutrition Surveys in Germany (M) 635

O

Obstetrics, The Relief of Pain in (O) H. C. Slocum 312
Ocular Neuroses, The Diagnosis and Treatment of (O) P. J. Leinfelder 414
Oklahoma City Clinical Society (E) Holman Taylor 339
Oophorectomy, Physiologic Approach to the Problem of (O) W. F. Mengert 465
O. P. A. Advisory Committee Statement on Sugar (M) 668
Oral Penicillin Therapy (M) 211
Organic Lesions Resulting from Emotional Stress (O) W. Dock 398
Orientation Course in Clinical Allergy (M) 267
Ovarian Tumors, A Clinical and Pathological Study of 170 Cases (O) C. T. Ashworth 525

Page

P

Pain Nature's Danger Signal (M) 373
Palpitation, The Evaluation of (O) T. R. Harrison 452
Parathyroid Adenoma of the Anterior Mediastinum (O) C. C. McDonald 468
Park, J. H., Jr., and Chapel, J. P. (O) Acute Meningococcemia without Meningitis 471
Pediatrics, New Publication (M) 553
Penicillin by Mouth Effective in Gonorrhea (M) 482
Effective for Gonorrhea (M) 352
for Infection of the Blood (M) 41
for Meningococcemia (M) 35
in Human Psittacosis (M) 231
in Lung Infections (M) 373
in Rat Bite Fever (M) 260
in the Treatment of Congenital Syphilis (O) E. E. Wilkinson, W. H. Saunders, and A. E. Hansen 401
Nebulized, in the Treatment of Respiratory Infections (O) R. J. Hanks 253
Research Center (E) R. B. Anderson 133
Treatment of Scarlet Fever (M) 422
Treatment of Syphilis (M) 511
Permanent Medical Centers for Physical Medicine (M) 269
Pertussis, Recent Advances in the Study of (O) W. L. Bradford 348
Plan of Out-Patient Care for Veterans (M) 483
Plastic Artificial Eyes (M) 372
Pleural Mesothelioma, with Report of a Case Presenting some Unusual Aspects (O) W. W. Coulter, Jr. 353
Policy on Assignment of M. C. Officers to Veterans Administration (M) 134
Pollok, L. W. (O) The Use of Spinocain as a Spinal Anesthetic 59
Postpartum Sterilization (O) A. T. Stewart 408
Premature Infant, The Care of, from an Obstetrical Standpoint (O) R. A. Johnston 5
President Advised Regarding Postwar Medical Needs (M) 218
Private Practice and Public Health, Orientation of (O) V. E. Schulze 212
Prostatic Hypertrophy, Operative Procedures for Its Relief (O) J. R. Reagan and Q. B. Lee 183
Prothro, E. W. (O) Practical Public Health Procedures in the Control of Some of the More Common Communicable Diseases 35
Public Health, Vital Statistics in (O) A. C. Love 473
Publicity for Scientific Medicine (M) 424

R

Radio Talks against Socialized Medicine Available (E) R. B. Anderson 338
Reagan, J. R., and Lee, Q. B. (O) Prostatic Hypertrophy—Operative Procedures for Its Relief 183
Recovery of Starved Children (M) 483
Red Cross Blood Donor Recruiting Program (M) 217
Reece, C. D. (O) Heart Injuries, with Report of Three Cases 151
Refresher Training for Doctors Leaving Service (M) 670
Report on Certain Bills Pending before Congress (M) 371
Research on National Scale, Importance of (M) 9
Rheumatic Fever, A Report on 100 Cases of, in Young Adults (O) R. W. Kimbro 296
Some Problems in (O) A. W. Harris 62
Rheumatic Valvulitis in Military Induction Examinations, with Special Reference to Cardiac Evaluation, The Incidence of (O) C. F. Shaffer 300
Rhinoplastic Correction of Common Nasal Deformities (O) J. H. Barrett 315
Rhoden, A. E. (O) Important Recent Developments in Laboratory Medicine 207
Ritota, M. C.: See Lindahl, W. W., jt. auth.
Rockwell, P. A.: See Herrmann, G. R., Jr., jt. auth.
Ross, W. R. (O) Planning a Routine Immunization Program 365
Ruptured Intervertebral Disk (O) R. L. Sewell 357
Russ, Dr. Stirling E. (E) R. B. Anderson 562

S

Salt Intake and Blood Pressure (M) 401

Page

Saunders, W. H.: See Wilkinson, E. E., jt. auth.
Schenck, C. P. (O) Intra-Ocular Melanoma 31
Schulze, V. E. (O) Orientation of Private Practice and Public Health 212
Schulze, V. E.: See Surber, W., jt. auth.
Section Officers, Changes in 1946 (E) R. B. Anderson 500
Selle, W. A. (O) Physical Factors in Cancer 197
Sensory Aid for the Blind (M) 482
Severance, A. O.: See Jackson, D., jt. auth.
Severance, A. O. (O) Endometriosis 310
Service in Appreciation of Returning Medical Officers (E) R. B. Anderson 227
Sewell, R. L. (O) Ruptured Intervertebral Disk 357
Shaffer, C. E. (O) The Incidence of Rheumatic Valvulitis in Military Induction Examinations with Special Reference to Cardiac Evaluation 300
Shearer, T. P., Wiper, T. B., and Miller, J. M. (O) Battle Injuries of the Urethra with Urinary Fistula 137
Shepeard, W. L.: See Fagin, I. D., jt. auth.
Shock, Treatment with Refrigeration (M) 669
Should our Doctors be Regimented (O) R. L. Thomas 396
Sinclair, J. G. (O) Preventable Fetal Death 359
Singing Inadvisable in Arrested Tuberculosis (M) 216
Singleton, A. O., and Knight, M. D. (O) Lobectomy and Pneumonectomy for Pulmonary Tuberculosis 10
Skin Grafting in Hemophilia (M) 216
Slocum, H. C. (O) The Relief of Pain in Obstetrics 312
Smith, H. E. (O) Tuberculosis in Selected Groups 319
"Socialize Everything or Nothing" (E) Holman Taylor 502
Socialized Medicine and Its Present Pay Roll Taxation (O) W. W. McAllister 340
in France (O) J. V. Sparks 135
Present Status of the National Effort (E) R. B. Anderson 500
Southern Medical Association Meeting (E) Holman Taylor 285
Society News, County—
Anderson-Houston-Leon Counties 221, 678
Angelina County 431
Armstrong-Donley-Childress-Collingsworth-Hall Counties 544, 678
Atascosa County 679
Austin-Waller Counties 81
Bastrop County 545
Bell County 45, 81, 380, 491, 545
Bexar County 328, 431, 611, 679
Bowie County 381, 611, 679
Bowie-Miller Counties 51, 172
Brazoria County 274, 545, 679
Brazos-Robertson Counties 611, 679
Brooks-Duval-Jim Wells Counties 679
Brown-Comanche-Mills-San Saba Counties 81, 222, 545, 679
Caldwell County 545
Cameron-Willacy Counties 491
Camp County 611
Collin County 545
Comal County 545
Cooke County 611
Coryell County 546
Dallas County 87, 172, 381, 546, 611
Dawson-Lynn-Terry-Gains-Yoakum Counties 679
Denton County 546, 679
DeWitt County 546
Eastland-Callahan Counties 81, 546
Ector-Midland-Martin-Howard-Andrews-Glasscock Counties 679
Ellis County 51, 546
El Paso County 46, 222, 274, 329, 491, 612
Erath-Hood-Somervell Counties 680
Falls County 81, 274, 431, 491, 546
Fannin County 274
Galveston County 546, 612, 680
Gonzales County 546
Grayson County 81, 492, 546
Gray-Wheeler Counties, 46, 81, 171, 222, 274, 329, 381, 431, 491, 612
Gregg County 546, 680

Page

Grimes County 546
Guadalupe County 546
Hale-Floyd-Briscoe-Swisher Counties 612
Hardeman-Cottle-Foard-Motley Counties 680
Hardin-Tyler Counties 546
Harris County 547
Harrison County 547
Hays-Blanco Counties 547, 680
Henderson County 547
Hidalgo-Starr Counties 46, 81, 172, 329, 431, 547
Hill County 492
Hopkins-Franklin Counties 680
Hunt-Rockwall-Rains Counties 46, 82, 432, 547, 612, 680
Jasper-Newton Counties Society 612, 680
Jefferson County 47, 82, 172, 222, 330, 382, 492, 612, 681
Karnes-Wilson Counties 612
Kerr-Kendall-Gillespie-Bandera Counties 682
Kimble-Mason-Menard-McCulloch Counties 682
Lamar County 548
Lampasas-Burnet-Llano Counties 682
LaSalle-Frio-Dimmit Counties 548
Lee County 548
Liberty-Chambers Counties 548
Limestone County 548
Lubbock-Crosby Counties 548, 682
McLennan County 492, 548, 683
Medina-Uvalde-Maverick-Val Verde-Edwards-Real-Kinney-Terrell-Zavala Counties Society 612
Milam County 548
Navarro County 548, 612
Nine County 223
Nolan-Fisher-Mitchell Counties 548
Nueces County 613
Orange County 548
Palo Pinto-Parker Counties 613
Pecos-Jeff Davis-Presidio-Brewster Counties 683
Potter County 613
Red River County 548
San Patricio-Aransas-Refugio Counties 223
Shelby-San Augustine-Sabine Counties 613
Smith County 82, 382, 492, 683
Tarrant County 47, 82, 382, 432, 549, 613, 683
Taylor-Jones Counties 275, 549
Titus County 549
Tom Green-Coke-Crockett-Concho-Irion-Sterling-Sutton-Schleicher Counties 383, 432, 492, 613, 683
Travis County 549
Upshur County 613
Walker-Madison-Trinity Counties 613
Washington County 549
Webb-Zapata-Jim Hogg Counties 613
Wharton-Jackson-Matagorda-Fort Bend Counties 432, 493, 549, 614
Wichita County 50, 83, 549
Wilbarger County 614, 683
Williamson County 549
Wood County 550
Young-Jack-Archer Counties 550

Society News, District—
Eleventh 50, 432
Fourth 432
North Texas 550
Seventh 383
Thirteenth 433
Twelfth 223, 550
Sparks, J. V. (O) Socialized Medicine in France 135
Speakers Bureau (M) 266
Formed to Again Combat Socialized Medicine (E) R. B. Anderson 228
Spinocain, The Use of, as a Spinal Anesthetic (O) L. W. Pollok 59
Sport Films in Army Hospitals (M) 20
Stalnaker, P. R. (O) Dieto-Metabolic Urology 241
State Board Medical Examinations (M) 195
State Board of Health Advisory Council (E) R. B. Anderson 393
State Medical Association Administration (E) R. B. Anderson 1
Transactions 416
Transactions of Executive Council 670
Stewart, A. T. (O) Postpartum Sterilization 408
Stout, A. P. (O) Tumor Seminar 564
Streptomycin Being Studied (M) 318
in Typhoid Fever (M) 77
Production (M) 375
Stuck, W. G. (O) Anatomical and Mechanical Aspects of Treatment of Fractures of the Forearm 232
Subacute Bacterial Endocarditis (M) 669
Sugar Deficiency in Blood (M) 667
"Sulfa" in Wounds Discontinued (M) 182
Sulfadiazine Effective in Pneumonic Plague (M) 143
Ineffective in Streptococcus Infection (M) 468
Sulfonamides, Effect on Teeth (M) 151
Sulkin, S. E. (O) Human Encephalitis due to the Western Equine Encephalomyelitis Virus 455
Surber, W., and Schulze, V. E. (O) The Tom Green County Tuberculosis Association Program 529

Page

Surgeon General Announces New Officer Release Policy (M) 321
Outlines Personnel Release Policy (M) 134
Urges Prompt Release of Eligible Personnel (M) 374

T

Terminal Saphenous Resection (O) E. Zax 307
Texas Child Health Council (E) Holman Taylor 229, 326
Texas Hospital Intern and Resident Staffs (E) R. B. Anderson 392
Texas Hospitals and Public Health Facilities, The Survey of (E) R. B. Anderson 559
Texas Medical Center, The Future of (O) E. W. Bertner 625
Thiouracil in Angina Pectoris (M) 165
in the Treatment of Hyperthyroidism, The Use of (O) E. E. Cooper 254
Thomas, R. L. (O) Should Our Doctors be Regimented 396
Thompson, S. E., and Coulter, W. W., Jr. (O) An Interesting Diagnostic Problem 157
Tom Green County Tuberculosis Association Program (O) W. Surber and V. E. Schulze 529
Torbett, J. W., Sr. (O) Brucellosis or Chronic Undulant Fever 250
Touzel, C. S. E. (O) Maternal Overprotection in Young Children 524
Trench Foot Among Soldiers (M) 76
Tuberculosis, A Survey of, Observed at Freeman Clinic from 1934 to 1944, and Related Statistics (O) G. L. Hacker 410
Tuberculosis, Pulmonary, Lobectomy and Pneumonectomy for (O) A. O. Singleton and M. D. Knight 10
Tuberculosis Remedy Rumor Spiked (M) 77
Tuberculosis in Selected Groups (O) H. E. Smith 319
Tuberculous Eye, Present Status of the (O) A. E. Jackson 161
Tularemia (O) W. W. Lindahl, M. C. Ritota, and T. B. Metzger 404
Tumors, Malignant Epithelial, in Young Age Group (O) A. J. Gill and C. T. Ashworth 39
Tumor Seminar (O) Conducted by A. P. Stout 564
Typhus Fever, A Border Public Health Problem (O) F. A. Musacchio 361

U

University of Texas Postgraduate Courses (E) R. B. Anderson 230
(M) 321
(E) H. E. Cunningham 504
Urethra with Urinary Fistula, Battle Injuries of (O) T. P. Shearer, T. B. Wiper, and J. M. Miller 137

V

Vaginoperitoneal Fistula with Chronic Peritonitis following Vaginal Hysterectomy (O) E. W. Bertner and K. C. Von Pohle 264
Van Meter Prize Award (M) 424
V-E Day Brings Bigger Task for Army Medical Department (M) 75
Venereal Disease Abstracts (M) 276
Conference (O) G. P. Franks 261
Control (M) 167, 269
Control in Camp Bowie (O) G. A. Gray 213
Veratrum Viride in the Treatment of Preeclampsia, Eclampsia, and other Hypertensive Syndromes of Pregnancy (O) J. E. Harkins 143
Victory Loan Drive (E) Holman Taylor 281
Virus Disease of the Respiratory Tract (O) O. J. La Barge 244
Treatment of (O) S. E. Sulkin 4
Vitamins and Soda (M) 9
Volume XLI Closes (E) Holman Taylor 624
Von Pohle, K. C.: See Bertner, E. W., jt. auth.

W

Wagner-Murray-Dingell Bill, 1945 Version (E) R. B. Anderson 53
Confusion Regarding (E) R. B. Anderson 561
Determined Opposition to (E) R. B. Anderson 129
Texas Newspapers and the 1945 Version of (E) R. B. Anderson 179
The New (E) R. B. Anderson 390
Views of Texas Congressmen in 1945 Version of (E) R. B. Anderson 282, 391
War Dog Recruitment Lags (M) 165
War Edema (M) 76
War Loan Drive, The Seventh (E) Holman Taylor 2
Weaver, J. D. (O) Carcinoma of the Cervix Based Upon Clinical and Cellular Classification 191
White, R. J. (O) Injury to the Colon from Air Hose Inflation 406
Wilkinson, E. E., Saunders, W. H., and Hansen, A. E. (O) Penicillin in the Treatment of Congenital Syphilis 401
Wiper, T. B.: See Shearer, T. P., jt. auth.
Wounded, 193,000 Pints of Blood Flown to (M) 18

X

X-Ray Irradiation of Esophageal Cancer (M) 203

Z

Zax, E. (O) Terminal Saphenous Resection 307

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

State Medical Association Administration continues under the same set-up as of the past year, pending final decision by those in authority. As announced last month in these columns, we are at present prohibited from holding the annual meeting of our House of Delegates, electing officers, reviewing the business affairs of the Association, and determining program and policy for the new year. Decision with regard to what shall be done in the face of the contingency has not been finally made, and will be announced promptly when known.

Present Status of Cult, Medical and Public Health Legislation.—Things are happening at Austin, but at this writing there are no developments which can be discussed intelligibly, and in editorial form. The situation is rather more encouraging than otherwise, even though it is apparent that our legislative program, both pro and con, can hardly eventuate in total success. Apparently, members of the Legislature are becoming more and more health-minded, if not entirely orthodox from the angle of medicine. Appropriations for health activities are distinctly more popular than they have been heretofore, and it may be that the legislature is going to endow the State Health Department a bit more liberally than might be expected, under the circumstances. It certainly is to be hoped that such will be the case. The influence of the State Medical Association is being extended in behalf of a number of very important items of the sort, some of them not before given special thought by our Legislative Committee. It begins to appear now that there will be a fairly ample appropriation for the continuance and enlargement of the Blood Bank operated by the State Health Department. There may even be some salary raises. It has for some time been difficult to employ and hold competent physicians for the Staff of the State Health Officer. The fact that satisfactory employees have been continued in the services is not incident to the pay involved, from the State Health Officer on down the line.

The extremely controversial measures providing for the legalization of Chiropractic and Naturopathy, have been stalled, one in the Senate and one in the House, now for some time. They have won their preliminary bouts, and are now ready for the knock-out. The decision in neither case may be anticipated with any degree of certainty.

If these two measures are enacted into law, they will be declared unconstitutional if and when attacked in the courts. The tax free hospital measure seems to be stalled, also. It can become a law, but chances are rather against it at this writing. The strictly health measures, needed by the Health Department and supported by our Legislative Committee, appear to be well under way, and most of them will likely be enacted into law. They were discussed in these columns last month, even though rather indefinitely, as this discussion must do. Sufficient to say now that the Legislative Committee will probably render a detailed report on each of the measures in which the doctors of Texas are interested, for preservation in the permanent files of the Association, and publication in the

JOURNAL. We certainly want to know who in the Legislature has done what to which legislation.

The Seventh War Loan Drive will be inaugurated during the month of May. A better way to put it would be that for the seventh time, beginning in this month, we have an opportunity of lending money to the government, for the dual purpose of patriotism and profit. It takes money to fight a war, and the government does not create wealth. It must get its money from those who do create wealth. Ordinarily, this is done through the medium of taxation, a rather broad term, but occasionally it becomes necessary to borrow money, and a double-header war is one of the emergencies which must be met in this way. Therefore, taxes must be and have been greatly increased, and borrowing must be and has been greatly extended. At that, not enough money has been coming in to make this war a pay-as-you-go proposition—not by any means. There is a continued overlapping of debit and credit, and it must be so until our two wars are won, at which time, by a continuation of high taxes and periodical borrowing, the overlapping will be stopped, and eventually the inconceivable cost of this war will settle down to a steady, progressive pay-off. Taxes will be decreased accordingly, and the interval between bond issues will be greatly extended. In the meantime, those of us who have been lending the government the use of our money in the face of this great emergency, will be receiving a better than average interest on our money, and probably at a time when we will be needing interest on something.

This is the largest War Loan the Government has so far sought—7 billion dollars, of which amount 4 billion is to be in E Bonds alone. That means that those of us who are in the lower-income brackets will have a greater opportunity than ever to do our part, and lay up something for the anticipated rainy day. Quite likely, the corporations and big money interests throughout the country would take up considerably more than their allotted share of this loan, were they permitted to do so. However, it is desired that individualized money be absorbed, thereby helping to keep down inflation, and that the individual be given the interest the government will pay on its bonded indebtedness.

Another reason for the size of the Bond Issue is the fact that there will be only two issues during this year. The war is not getting any cheaper, regardless of the near approach of the collapse of Germany. V-Day in Europe will merely mean that men and materiel will be moved into another and far distant theater of war. Whether the fighting will be any cheaper in lives and money depends upon developments there. No one can anticipate that with any degree of accuracy. The big idea would seem to be that we must keep eternally at it—in whatever our share of the war activities may be. A large proportion of the doctors of the country are in the Armed Forces. Those remaining at home are up against it, also, but in a different way. Our activities should result in larger incomes, while undoubtedly theirs will result in extra loss of life. If the extra money is put into bonds, it will be on hand to help out later on, when perhaps there won't be so much extra money. Little can be done about the over-work of the physician at home, but whatever he can do to lighten the strain, he should do. He is needed, perhaps not so urgently as the doctor in the front lines, but needed, nevertheless. And it is his privilege to insure his security by making the only gilt-edge investment in the world paying two and one-half per cent interest.

The JOURNAL has been proud to do its part in advertising the sale of War Bonds. Quite a few pages of our ad section have been gladly contributed. This month the holders of one of the most valuable "preferred" spaces of the ad section, the back cover, Scott & White Clinic and Kings Daughters Clinic and Hospital, both at Temple, have donated the same to the current drive.

Our Membership on May First This Year, at which time the books of the Association for the fiscal year were closed, was 4,333. This is in contrast with the total membership at approximately the same time last year, which was 4,258. As it happened, the books for the fiscal year were closed last year on April 24, whereas they were closed this year on April 30. This difference is more important than the length of time involved would indicate, for the reason that dues are usually coming in quite rapidly at the close of the fiscal year.

It will be remembered that last year regular membership dues were on a $9.00 per capita basis, whereas this year they are $20.00. Last year, there were 1,019 military members, with no assessed dues. This year, there are 1,031 military members, with a $1.00 per capita assessment. Intern and honorary members paid $4.00 per capita then, as now. Last year, there were 14 intern and 44 honorary members. This year there are 25 intern and 40 honorary members. Last year, there were 4 members emeritus, which number has now been reduced to 3.

As planned and as anticipated, the money end of our membership problem has paid off, and it begins to appear that we are holding

our own in the matter of numbers. Last year we received $28,593.00 from our regular membership, and $232.00 from our intern and honorary memberships. That makes a total of $28,825.00.

This year, we have received $64,680.00 from our regular dues; $260.00 from our intern and honorary membership dues, and $1,031.00 from our military membership. That makes a total of $65,971.00. These figures will be included in the reports of the Board of Trustees and of the State Secretary, together with a further and full accounting.

At the time the books were closed, eighteen county medical societies had not rendered annual reports, although they had paid dues for most of their members. Two county societies had neither paid dues nor rendered annual reports. Seven county societies reported less than five members, the minimum membership required by the by-laws of the Association.

In this connection, it will be remembered that while the books for the fiscal year have been closed, the filing of belated annual reports by county societies, and the payment of dues for their members, will be in order through the balance of the calendar year. The State Secretary will use the latest information he has concerning such matters, in filing his annual report.

New Film for Motion Picture Library.—Despite the practical impossibility of securing necessary materials, and as a result, the dearth in the production of new motion picture films during the war, the Library has been singularly fortunate in acquiring additions to its collection of films for lending. The latest acquisition is a film purchased by the Hurst Eye, Ear and Throat Hospital-Clinic at Longview, and presented as an outright gift to the Library. Dr. Hurst is a member of the Library Endowment Committee of the Association, which position has impressed him not only with the needs but the opportunity existing for developing a library service to physicians, and for health education of the public. The film will serve splendidly for the latter purpose. Showing such films as these to the public serves a dual purpose—sound health education for the public's protection, and instilling in lay minds a proper appreciation of medicine's contribution to the public weal. It is to be hoped that other members or groups in Texas medicine will follow the example set by the Hurst Clinic.

A description of the film follows:

Eyes For Tomorrow. 16 mm., sound, showing time, 25 minutes. (Available as the result of a gift from the Hurst Eye, Ear and Throat Hospital-Clinic, Longview, Texas.)

This film produced by the National Society for the Prevention of Blindness is in the form of a lecture, with graphic, pictorial illustrations of the many factors concerned in the conservation of vision and the prevention of blindness from conception to old age. The causes of visual defects and blindness are reviewed, and the measures that should be taken to prevent them are emphasized. Premarital and prenatal serologic tests to prevent blindness caused by syphilis, prophylactic eye drops at birth, prenatal instructions to mothers, regular examinations with immunization against preventable diseases for infants, and periodical physical examinations for adults, are a few of the preventive factors outlined. The value of proper lighting, safeguards in industry, wholesome food, exercise, and proper hygiene, are stressed. Diseases causing visual defects and blindness and their treatment, are discussed. Emphasis throughout is properly placed on prevention. The film will be of educational value for high school students, women's organizations, and labor groups.

Additional Donations to Library Endowment Fund.—The "County Medical Society Library Endowment Fund" of the Association has received two donations from county societies since the last report made in these columns, in the April *Journal*, $25.00 from Travis County Medical Society on April 17, and $15.00 from DeWitt County Medical Society on May 4. These are the ninth and tenth county medical societies to contribute to this fund since appeal was made by the Library Endowment Committee of the State Association under date of January 4, 1945. The appeal of that committee was addressed to the officers of the 126 county medical societies in the state. Repeated references have been made to the work of this Committee in these columns, and particular attention is again called to the letter of the committee, pointing out the needs of the Library and its potentialities in growth and services, published in the February, 1945, JOURNAL, page 514. The County Medical Society Library Endowment Fund now totals $400, but the Texas Memorial Medical Library Association has a total of $9,000 in nine separate endowment funds. No more worthy use could be found for idle surplus funds. Such donations are deductible from income taxes by individuals or corporations.

CURRENT EDITORIAL COMMENT*

Preparation of Potent R*h* Antiserum.—Because of the great number of whole blood transfusions now being given, there is increased opportunity for R*h* negative individuals to be sensitized so that later transfusions may be dangerous. The chief problem in routine R*h* typing is to secure a sufficient

*This department of the JOURNAL presents editorial comments on current items pertaining to the science, art and practice of medicine, contributed by members of the State Medical Association and scientists closely associated with the medical profession of Texas. Invitation is hereby extended to any member of the State Medical Association of Texas to submit such discussions for this department. The discussions should not be more than 500 words in length.

and continuing source of potent antisera. Initially a routine R*h* typing service was established in the William Buchanan Blood, Plasma, and Serum Center, Dallas, on the basis of 200 cc. of very high titered plasma obtained from the mother of an erythroblastotic child. With a titer of 1:640 this plasma was theoretically adequate to perform approximately 80,000 tests. Due to the increased demands from other institutions and the quantities used for investigative purposes and routine testing (8,000 tests to March, 1945), it soon became evident that an additional source of antiserum was necessary.

The use of anti-Rhesus guinea pig and rabbit sera have proved inadequate, in that these sera are low in titer and difficult to produce with regularity. At present the best sera are obtained from human sources such as mothers of erythroblastotic infants and R*h*-negative individuals iso-immunized by repeated transfusions of R*h* positive blood. It seemed logical to go a step farther and by intravenous injection of R*h* positive cells to raise the titers of the serum from mothers delivered of erythroblastotic infants. This procedure can be used either shortly after delivery or at later intervals to produce satisfactory antisera through the anamnestic reaction. Obviously, the possible risks of such a procedure must be carefully weighed and the decision made in consultation with the patient on an individual basis.

In one case, a mother delivered an erythroblastotic infant. Her serum showed an anti-R*h* titer of 1:4 by the Wiener blocking test. A series of small intravenous injections of R*h* positive cells (1 cc. of R*h* positive blood in 1 cc. of citrated saline) were given over a period of eight days. It was noted that the titer of anti-R*h* agglutinins rose markedly. On the thirteenth day, five days after the last injection, a titer of 1:2048 was found, and 500 cc. of blood was drawn to prepare anti-R*h* testing sera. The blood drawn was replaced in the patient by transfusions of R*h* negative blood. In a second case, the mother from whom our original 200 cc. of anti-R*h* serum was obtained volunteered to submit to isoimmunization eighteen months after she had delivered the erythroblastotic child. At the time the experiment was started, her serum still had a titer of 1:64 against Rh_0' Rh_0'' cells. A series of small intravenous injections over a period of eight days were given. On the twelfth day a titer of 1:2560 was obtained from her serum and 750 cc. of blood was collected for the preparation of anti-R*h* testing serum. The blood was replaced in the patient by transfusion of R*h*-negative blood.

The above antisera were treated to absorb the anti-A and anti-B agglutinins by absorption with A and B R*h* negative washed erythrocytes. The two anti-R*h* sera thus prepared were tested for specificity by using 610 random bloods. The serum from case 1 gave a reactivity of 86.39 per cent and that of case 2 gave positive reactions in positive reactions in 85.97 per cent of bloods.

In the light of the risks involved by this technic, we believe that previously sensitized men and women volunteers who understand the essential consequences of the procedure should be accepted for preparation of anti-R*h* testing sera.

A complete report of these cases with methods of production of R*h* antisera for routine use will appear elsewhere.

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Treatment of Virus Diseases.—The development of a rational approach to research on the treatment of virus infections presents many difficulties because of the nature of the virus itself. These agents multiply intracellularly and little is known regarding the mechanism of their pathogenesis. Furthermore, apparently lacking independent enzyme systems, their metabolism appears to be intimately associated with that of the host cell. Their only attribute of life seems to be their ability to reproduce, and even here the energy of the host cell is necessary. It is not surprising therefore, that they have proved refractory to antibiotics, sulfonamides and other chemotherapeutic agents which have been so effective in combating other agents of disease. On the basis of our present knowledge regarding these simpler forms of life, one of the most promising methods of attack with drugs appears to be that directed toward the reproductive process. It is probable that the virus, after gaining access to susceptible tissues of the host, stimulates the cell in such a way that it diverts it from its normal function to that of synthesizing the virus complex. Since these synthetic processes are presumed to be catalyzed by enzymes, virus reproduction may be inhibited by the phenomenon of drug-enzyme-substrate competition.

Sulfonamide therapy has proven successful in trachoma, inclusion blenorrhea and lymphogranuloma venereum, though there is increasing evidence that the causative agents of these diseases do not fall within the category of true viruses. Scattered reports of

success in treatment of other virus diseases have appeared. One must not lose sight of the fact that apparently good results with certain therapeutic agents may be due either to mistaken diagnosis or to the beneficial effects from concomitant therapy. This has been the case with certain studies indicating a favorable effect of the sulfonamides in the treatment of trachoma. The favorable experimental results with sulfonamides in lymphocytic choriomeningitis have not been consistent and when effective were apparently dependent upon early administration which more nearly approached prophylaxis than treatment. Sulfonamide therapy has been given extensive trial in patients with primary atypical pneumonia. Neither symptomatic improvement nor alteration in the febrile course was observed with any degree of consistency. In fact, many patients were even more uncomfortable when receiving these drugs. Sufficient evidence exists to conclude that the sulfonamide drugs have no direct effect on infections caused by filtrable viruses. Secondary infection of the vesicles in smallpox is believed to be responsible for much of the late toxemia in this disease and is an important factor contributing to the high mortality rate in the later stage of this malady. It has recently been shown that sulfonamide administration throughout the course of the disease has strikingly diminished the degree of secondary infection and consequently lessened mortality in the late phase of the disease. Penicillin had a similar favorable effect. Despite the meager results so far obtained, there is no reason to suppose that great advances in the treatment of virus diseases will not be made in the future by means of chemotherapy; indeed, this seems to be the most likely source of curative agents for this type of malady.

Extensive attempts at serotherapy have likewise not been successful in treatment of virus diseases. The primary difficulty with serotherapy lies in the fact that viruses are intracellularly situated and the immune bodies cannot reach the infectious agents because they are unable to enter the cells. Evidence also indicates that in most virus diseases, by the time symptoms appear all cells which are subject to infection have already been invaded by virus. This precludes the possibility of action of immune serum on viruses going from any infected cell to a normal one. Future success in the treatment of virus diseases with immune bodies will depend to a great extent upon the development of methods for earlier diagnosis. For each intracellular parasite the appropriate time beyond which the parenteral injection of antibodies is no longer effective must be determined experimentally. There are a few scattered reports of apparently successful results with serotherapy in virus diseases of man or experimental animals, but as yet no clearcut example of effective serotherapy of an established virus disease has appeared. Convalescent serum, on the other hand, has been employed with success in prophylaxis and in modifying the course of certain diseases including measles, mumps and chickenpox. At the moment, treatment of virus diseases in general is largely a matter for future development.

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THE CARE OF THE PREMATURE INFANT FROM AN OBSTETRICAL STANDPOINT

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The object of the obstetrician is two-fold, first, to see that the expectant mother passes through the period of gestation safely, and, second, to aid in carrying the product of conception a sufficient length of time so that after its expulsion, the newborn is alive and healthy for at least six weeks. Thereafter the responsibility of the infant rests with the pediatrician. The greatest risk occurs to the infant during the first two days of life as shown by the fact that approximately 70 per cent of neonatal deaths occur during this time (Chart 1). In an analysis of data of live births in New York City in 1939, Duffield, *et al.*, state:

"It is a well recognized fact that reduction in the mortality during the first month of life has not kept pace with reduction in mortality during the remainder of the first year of life. It is not so generally realized that the mortality of the first day of life has shown practically no decrease in the last twenty-five years—and actually no decrease in New York City either among white or colored infants. These deaths now constitute about one-third of all deaths during the first year of life in New York City."

Table 1.

Year	Total Births	Infant Deaths	Infant Mortality Rate
1943	12,824	627	48.0
1942	11,656	485	41.6
1941	10,518	447	43.0
1940	9,244	443	48.0
1939	8,240	435	53.0
1938	7,866	408	51.9
1937	6,982	409	58.6
1936	6,298	350	55.6
1935	5,777	343	59.4

There is such a close association between the mother and the child that any study of

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infant mortality must include the consideration of each. To lower infant mortality is the constant objective of every obstetrician, and prematurity, being the greatest cause of neonatal deaths, becomes the most important point of attack for the accoucheur.

The U. S. Bureau of Vital Statistics has shown a continual decrease in infant deaths during the past ten years as shown by Chart 2. This can be attributed to better trained where obstetrics has received its proper place.

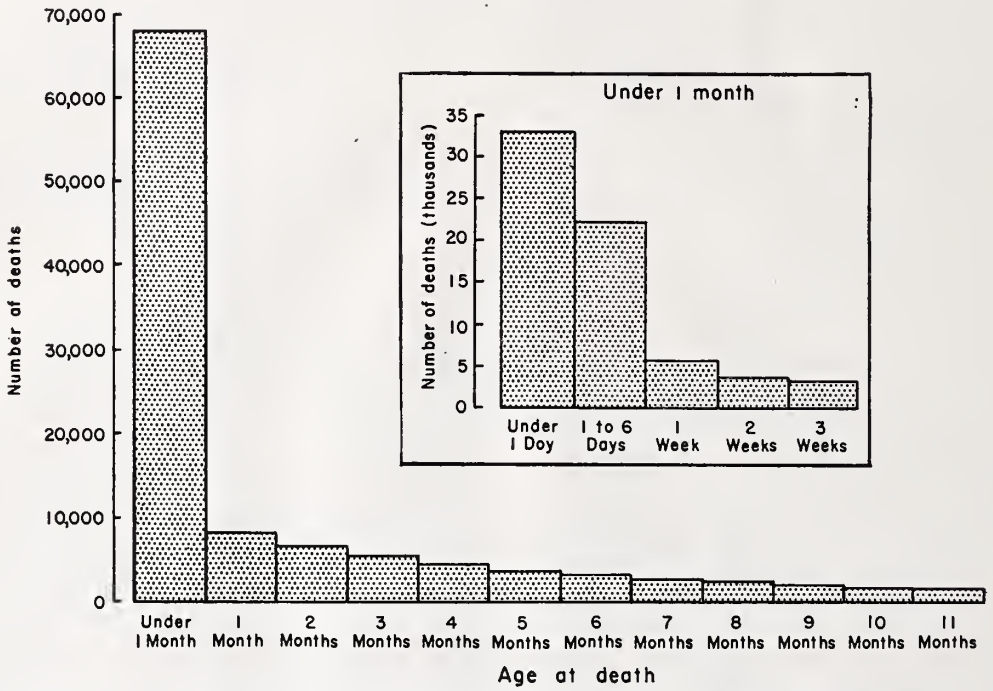

CHART 1. Infant deaths, by age in months, in the United States in 1940, from the U. S. Department of Labor, Children's Bureau. The inset shows the number of deaths (in thousands) in infants under one month.

physicians, graduating from medical colleges Also, the layman has become "obstetrically conscious," thereby demanding better care for the pregnant woman. The press, the government, and the monthly periodicals have contributed to the education of the public concerning prenatal care. During the past year, 1943, throughout the United States statistics show an increase in both maternal and fetal mortality. Dr. Austin Hill has analyzed the statistics in the larger cities of Texas and found a definite increase in the infant death rate. He stresses the lack of adequate medical care due to a shortage of physicans, as well as the crowded condition of hospitals, as a cause. The frequent traveling of expectant mothers and the inadequate or absence of help during the puerperal state in so many cases, has played a definite part in increasing this mortality (Table 1). In Oregon, the fetal death rate is 31 per 1,000 live births, while in San Antonio and El Paso the fetal death rate in 1940 reached 106 and 85.3 per 1,000 live births, respectively. In Houston the fetal mortality for 1943, in approximately 12,824 births, was 48 per 1,000. Therefore, one can see there is definite room for improvement in Texas (Table 2). It is believed that a goal of 25 deaths per 1,000 live births can be attained because in Portland, Oregon, the rate reached 25.4 per 1,000 live births. Chicago and San Francisco were among cities with rates less than 30 per 1,000. In order to obtain such results, improvements must be made in regard to (1) prenatal care, (2) intrapartum care, and, also (3) postnatal care.

TABLE 2. *Infant Mortality Rate 1939-1943*

City	1943	1942	1941	1940	1939
Fort Worth	39.1	41.3	37.4	45.9	48.3
Dallas	39.25	39.35	47.00	56.43	57.22
Austin	41.81	49.67	54.37	63.92	65.45
Houston	48.0	41.6	43.0	48.0	53.0
Galveston	48.0	53.1	41.8	41.5	60.5
Beaumont	48.62	42.40	44.12	50.27	55.91
El Paso	63.1	63.5	66.6	85.3	83.5
San Antonio	68.0	60.8	55.3	106.6	—

TABLE 3. *Infant Mortality Rate of Various Cities of the United States.*

City	1942	1941
Milwaukee	26.9	33.9
Memphis	44.2	49.1
Birmingham	50.6	50.1
Atlanta	50.10	51.95
Louisville	42.7	56.4
Houston	41.6	48.0

PRENATAL CARE

Education of the public has been the means of getting a great majority of pregnant women to consult the physician early. Bundesen, in 1935, found that approximately 50 per cent of 795 premature infants in Chicago received inadequate prenatal care, in that they were not seen until after the fifth month. He states that "if they cannot be corrected, at least pregnancy can be prolonged as close to term as possible and the method of delivery that is safest for the child may be planned and carried out."

With the employment of the routine Wassermann reaction on all pregnant women, syphilis has almost disappeared as a cause of prematurity. It is most striking to see how few infant deaths are attributable to syphilis in the annual report of the large obstetric clinics. The medical profession has been taught by Litzenberg that hypothyroidism frequently is the cause of premature delivery and how it can be corrected by keeping the basal metabolic rate within normal limits.

TABLE 4. *Principal Causes of Death of Infants, Houston, Texas, 1943.*

Prematurity	170
Pneumonia (all forms)	85
Diarrhea and enteritis	62
Congenital debility	54
Congenital malformation	40
Injury at birth	15
All other causes	201
Total	627

No doubt general hygienic measures play a definite part in the continuation of pregnancy to viability of the fetus. Frequent hemoglobin determinations will aid in recognizing anemia and Rh determinations may be employed routinely in the near future.

To recognize and correct any vaginal or cervical infection during pregnancy often plays a part in preventing premature labor. The use of progesterone in sufficient amounts has aided in the continuation of pregnancy in many cases. Only recently a patient with premature rupture of the membranes was aided in continuing her pregnancy for four months and to viability by insisting she stay constantly in bed and receive progesterone. The medical profession should revise its idea about premature infants, realizing that a large number of infants weighing between two and one-half and four pounds can be saved by specialized care. At present, with the indiscriminate use of vitamins for every ill, one must admit that pregnancy may be aided and certainly no harm can occur from the judicious use of all vitamins.

INTRAPARTUM CARE

One should attempt to determine the size of the baby at the onset of every labor and, if the child seems to be less than 5½ pounds in weight, no opiates should be given in order to stop uterine contractions. It is much wiser to rely on small doses of barbiturates or preferably avoid any analgesics, acquainting the patient with the reason for not attempting to alleviate her pains of labor. The administering of vitamin K to the mother during labor is beneficial to the premature infant by correcting any lack of prothrombin. Inhalation anesthesia should be avoided in the majority of the cases of prematurity and the use of local infiltration, such as pudendal block, offers the premature infant its best chance of survival. Episiotomy is frequently a wise measure to prevent any harm to the small head of the infant. Spontaneous delivery offers less trauma than any operative interference. Let us remember the dictum, "*Primum non nocere*" is doubly important when dealing with the premature infant. No doubt in the severe cases of preëclampsia when the cervix is not suitable for induction of labor, cesarean section under local, caudal or spinal anesthesia will save more uninjured premature babies than the method now employed of induction of labor with delivery through the natural passages.

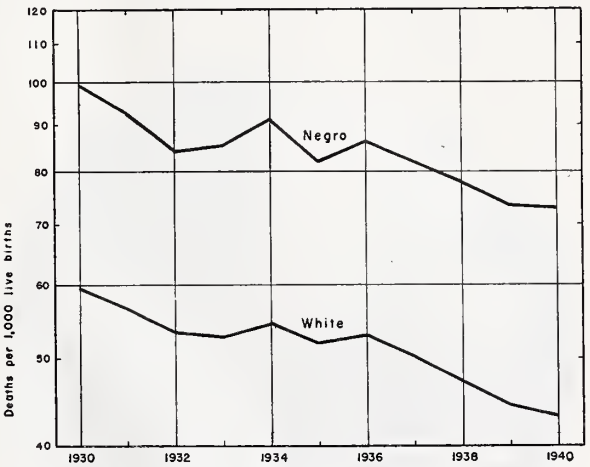

CHART 2. Infant mortality rates among white and Negro infants in the United States, for the period 1930-1940. (From the U. S. Department of Labor, Children's Bureau.)

POSTNATAL CARE

As soon as the premature baby is delivered it should be kept warm, by placing it in an already prepared incubator with available oxygen. The trachea should be carefully and thoroughly cleansed of any mucus. The umbilical cord should not be clamped until it has quit pulsating so as to obtain as much blood as possible. Nurses specially trained in the care of premature infants should be constantly in attendance. In Chicago, the

health department under the instigation of Dr. Bundesen, made efforts to lower the infant mortality due to prematurity and such measures were carried out with excellent results. In cities of more than 100,000 population, a centralized premature nursery, inde-

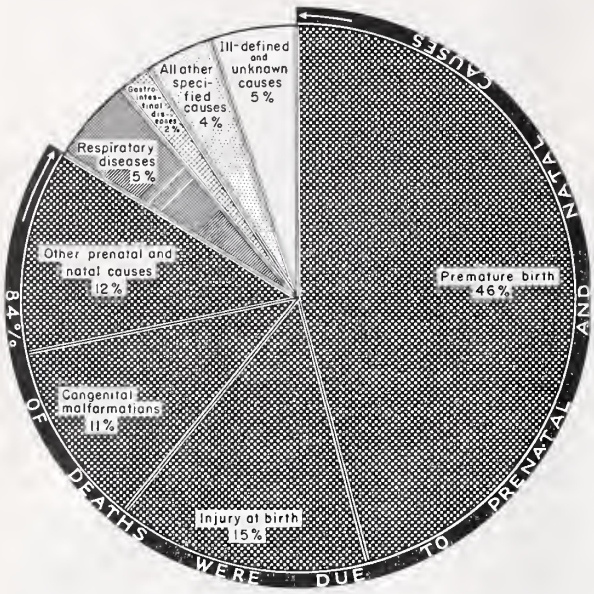
84% OF DEATHS WERE DUE TO PRENATAL AND NATAL CAUSES
Premature birth 46%
Injury at birth 15%
Congenital malformations 11%
Other prenatal and natal causes 12%
Respiratory diseases 5%
Gastro-intestinal dis. under 2 2%
All other specified causes 4%
Ill-defined and unknown causes 5%

CHART 3. Showing causes of neonatal death, with percentage distribution, in the United States in 1940. (From the U. S. Department of Labor, Children's Bureau.)

pendent of any general hospital, should offer the most economical and practical plan. Such a place would offer every premature baby, regardless of its social environment, an opportunity to be carried immediately in a portable incubator to this ideal nursery, which should have automatically controlled temperature, humidity and oxygen.

At St. Joseph's Infirmary in Houston, from its opening in August, 1938, to December, 1943, there were 824 premature infants with 385 fetal deaths, thus giving a fetal mortality of 46.6 per cent. Throughout the United States the cause of death from prematurity,

TABLE 5. *Showing Improvement in Infant Death Rates at St. Joseph's Infirmary, Houston, Texas.*

August 1938 to December 1943			
Premature Infants	824		
Deaths	385		
Lived	439	=	46.6%
December 1943 to May 1944			
Premature Infants	51		
Deaths	8		
Lived	40	=	15.8%

as published from the U. S. Bureau of Vital Statistics, is 46 per cent. When St. Joseph's Infirmary provided a special premature nursery with adequately trained nurses constantly in attendance, in December, 1943, the results obtained up to May 1, 1944, showed only 8 deaths in 51 premature infants. This decrease in mortality from 46.6 per cent to 15.8 per cent is indicative, while not conclusive, of the value of specialized care for the premature.

In every community an organized effort should be made to establish a human milk bank so that mother's milk is always available for the premature. It is generally recognized that the premature infant often develops serious anemia by the third or fourth month of life. The obstetrician should aid the pediatrician in preventing the development of the serious state of this condition.

CONCLUSION

1. The obstetrician has a very real responsibility in the care of the mother with regard to her prematurely-born infant.

2. The greatest danger to the premature infant's life occurs within its first forty-eight hours of extra-uterine existence.

3. During the decade ending in 1940, there were gradual decreases in both infant and maternal mortality rates in the United States.

4. These improvements followed the raising of medical school standards, more adequate postgraduate training, and education of the laity.

5. The improvement in infant death rates during the first month of life, however, did not keep pace with reductions in infant death rates at other ages, nor with reductions in maternal mortality.

6. Since 1941 there has been, in various cities in the United States, a definite, alarming increase in both maternal and infant death rates.

7. These increases have been found to be due to a decreased number of civilian physicians, crowded hospital conditions, increased travel by the expectant mother, and inadequate help in the home.

8. A return to the trend in the direction of reduction in maternal and infant death rates will have to be made by the obstetrician through improvements in prenatal, intrapartum, and postnatal care, particularly with regard to the prematurely-born child.

9. Prenatal care will have to include adequate prenatal care, routine Wassermann test, basal metabolic rate determinations wherever indicated, improvement in hygienic conditions, routine blood studies, routine Rh determinations.

10. Intrapartum care must include the use of vitamin K, avoidance of analgesia and anesthesia with the substitution of only small doses of barbiturates and local infiltration

anesthesia along with deep episiotomy and without operative interference.

11. In postnatal care the following must be insisted upon: immediate placement of the premature in a warm crib, administration of oxygen if necessary after clearing the upper air passages, the establishment of a premature infant nursery with constant attendance by an adequately trained nursing staff, and feeding with human milk.

4115 Fannin.

ABSTRACT OF DISCUSSION

Dr. Thomas J. McElhenney, Austin: There is very little that one could add to Dr. Johnston's most complete paper on the prematurely born infant. I think it a very healthful condition where the pediatrician and the obstetrician are on the same program. All I will attempt to do is to elaborate on some of the points that Dr. Johnston has so ably presented.

We know there is a very definite relationship between the mother's diet and the product of her pregnancy. The conclusions of Bertha S. Burke and others, after a very extensive study involving 216 cases, were: If the diet of the mother during pregnancy is very poor, she will have an infant whose condition will likewise be poor. In these cases reported all stillborn, all infants who died within a few days of birth, most congenital defects, all premature and all functionally immature infants were born to mothers whose diets during pregnancy were very inadequate. Of this series only 10 per cent of the mothers consumed diets which met the requirement of protein as recommended by the food and nutritian board of the National Research Council. Eighty-five grams of protein from the fourth through the ninth month are suggested as an excellent diet. The National Research Council unfortunately does not give us a complete list of the elements required. There are ninety-odd elements known to man. Each has a definite function in the human body. We know a little about a few. Many of these elements act as catalysts and only minute traces are probably needed. There are many animal experiments by McCollum, Simmons, and others, that prove the need of these elements in our nutritional life. We have refined so many of our foods that one could find but few natural foods on the market before the war. Of course it is much worse now.

The American public hears much about vitamins. I wonder if the prevalent use of one pill a day has had anything to do with the increase in the infant mortality rate since 1941. I do not believe much has been said about the interrelationship of vitamins, minerals and hormones. The pregnant woman needs all of these for both her health and her child's because the infant stores the greatest amount of these elements during the last two months of pregnancy. We know there are some very definite changes in metabolism, and we should not forget that old adage "a tooth for every child."

Prematurity was reduced to one-third of its former rate at the Maternity Center Association in New York by means of systematic prenatal care—Woodbury points out that prematurity depends primarily on the health of the mother. I think a tuberculosis test, the determination of the Rh factor, the examination of the blood, urine, kidney function, and basal metabolism should be routine for every mother.

There are some infants, especially premature, that receive a diagnosis of birth injury when the condition is truly an oxygen lack, rather than a mechanical injury. I think a lot of damage is done to the obstetrician when the condition is caused primarily by a lack of oxygen. Clifford has proven that the effect of anoxia on the smaller cerebral vessels is to increase fragility of the vessel wall to produce actual leakage of red blood cells and even hemorrhage. Normal functional pressure can produce disruption of capillaries if there is an underlying weakness of the vascular endothelium. These babies should be kept in an atmosphere of from 50 to 65 per cent oxygen after getting rid of all the mucus possible. Clifford thinks that respiration is spontaneous. The infant will breathe just as soon without lobeline or coramine.

What Dr. Johnston has proved with regard to the special section for the premature nursery and the need for constant attendance of adequately trained nursing personnel is very interesting and each hospital that attempts to take care of premature infants should establish such a nursery. The reports of Hess, Blazt and McKhann on similar nursery supervision have also proved the importance to the premature of such care.

It is very necessary to let the cord stop pulsating and to milk whatever blood that is left back into the premature infant before clamping. From 30 to 60 cc. of blood is immediately placed into the circulation of the premature by doing so. This amount of blood can be life saving.

There is an inexpensive plastic incubator on the market that costs only about $38.00, which can be carried in one hand and has an oxygen tank enclosed. This or a similar type should be in the possession of every doctor that does any obstetric practice.

IMPORTANCE OF RESEARCH ON NATIONAL SCALE

"Experience of the past and vision of the future clearly show the need for organization, coordination and support of medical research, as of all scientific research, on a national scale," said Brigadier General Stanhope Bayne-Jones, U. S. A., Deputy Chief of the Preventive Medicine Service, Office of The Surgeon General, in a recent address at the semicentennial celebration of the Yale Chapter of Sigma Xi at New Haven, Conn.

Citing control of the typhus fever epidemic at Naples through the use of DDT, General Bayne-Jones stated that "the synthesis of a half a dozen sciences is in a single puff of DDT powder."

He said that planning is now being made for post-war research but "when the compelling necessities of the war end and the urge of patriotism diminishes, there probably will not be the same degree of motivation toward group work for the solution of scientific problems."

He added that funds and laboratories may be made available but stressed the need to arouse or keep at high pitch in post-war years the present spirit of collaboration and intense application.—*S. G. O. Notes*, March 31, 1945.

VITAMINS AND SODA

The general impression that all vitamins are rapidly destroyed by soda or by basic solutions is far from correct, it is advised in the April issue of *Hygeia, The Health Magazine.* In answer to a query *Hygeia* says:

"True some of the vitamins, such as vitamin C, thiamine and riboflavin, are more easily destroyed in basic solutions than in acid or neutral solutions, but even here the destruction depends on time and other stimulating factors. Some vitamins, such as biotin and folic acid, are more stable in basic solutions than in acid solutions. Nicotinic acid, for example, is more soluble in the presence of soda than in pure water solutions."

LOBECTOMY AND PNEUMONECTOMY FOR PULMONARY TUBERCULOSIS

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Any discussion of pulmonary suppuration that makes no original contribution would not be complete without mention of the trials and errors in chest surgery that make possible our modern attack on the problem. Chest surgery has been spoken of as a development of the twentieth century, but in the writings of Hippocrates[9] has been found his vivid description of the surgical treatment of postpneumonic chest abscess, both inside and outside the lung. He advised that an opening be made at the seat of the greatest pain and swelling, at the same time as low as possible, first with a scalpel and then with a curved bistoury. The cavity was to be kept open with a tent and irrigated twice daily with warm wine and oil. Later a lead cannula was inserted for drainage and gradually shortened until healing occurred. This is not a far cry from the treatment of empyema and lung abscess as it is done today. It was not until the beginning of the eighteenth century that the operation was practiced with any frequency.

The German surgeons Block, Gluck, Schmidt and Biondi,[8] all performed large volumes of chest surgery on animals and predicted pneumonectomy would become a practicable procedure. At the Eleventh Congress of German Surgeons in 1882, Block[8] of Danzig described chest operations on sixty various experimental animals and showed some living animals with partial and total pneumonectomies. His operation was usually completed by mass ligation of hilar structures within two or three minutes. Block later attempted pneumonectomy on a young woman with apical tuberculosis. She died and a medicolegal inquiry resulted in Block committing suicide from chagrin and despair.

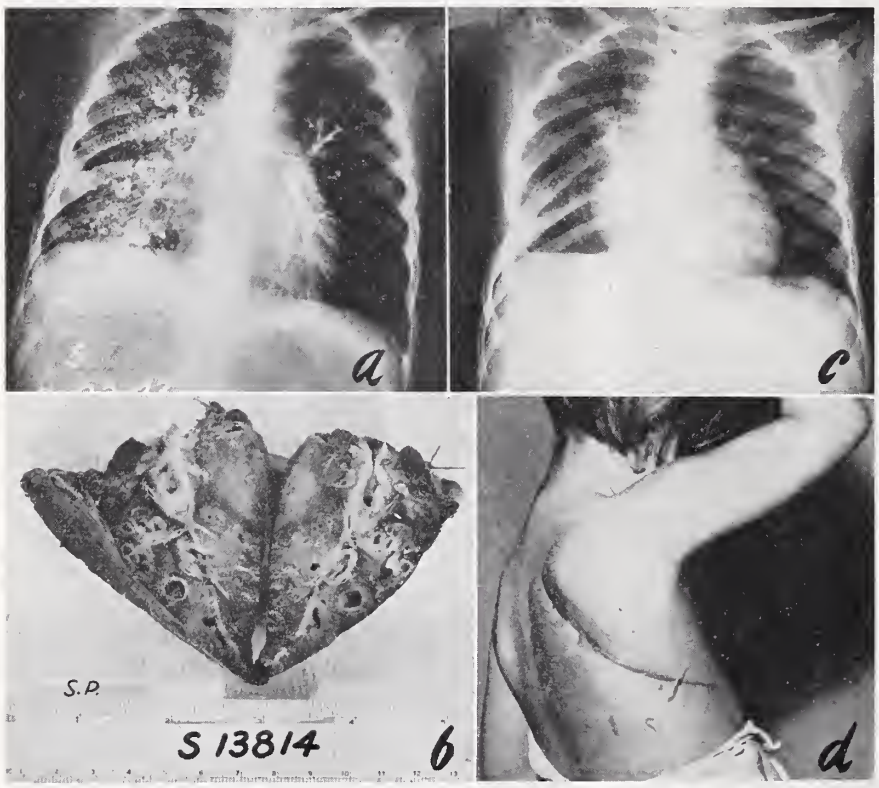

FIG. 1*a*. (Case 3) Bronchogram showing advanced bronchiectasis of right lower lobe.
b. (Case 3) Sectioned specimen showing pathologic condition as indicated by bronchogram.
c. (Case 3) Film of chest after healing (3 months), showing residual pleural thickening in right base.
d. Three months postoperative, showing healed incision used for lower lobectomy.

Kronlein[8] was the first to deliberately remove a portion of a human lung except for traumatic hernia. His case was an 18-year-old girl on whom he did a partial lobectomy during an operation for sarcoma of the ribs. The wound was sutured with catgut and the patient survived.

Other methods were attempted to eradicate suppurative foci in the lungs. About the turn of the last century, Sauerbruch and Schumacher[4] began to ligate the main arterial branch of a lobe for bronchiectasis. This caused a fibrotic atrophy of the lobe with resultant collapse of cavities. Graham's method of destructive cauterization of lobes is another variation of broncho-vascular segmental pneumonectomy. Only in 1933 did Rienoff[10] advocate definitive lobectomy and pneumonectomy by individual ligation technique.

It must be remembered that the early chest operations were performed without the use of positive pressure anesthesia as we know

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Read before the Section on Surgery, State Medical Association of Texas, San Antonio, May 4, 1944.

it today. Quenu[5] of Paris devised in 1896 the first positive pressure method as a sort of diver's helmet that enclosed the patient's head. Rudolph Matas of New Orleans, using the work of Fell with the O'Dwyer tube for artificial respiration, devised a differential pressure apparatus which was used by Parham of New Orleans in 1898 for a resection of the chest wall for tumor. This was the first operation under differential pressure in the United States. Sauerbruch in 1903 devised a negative pressure chamber of 500 cubic feet capacity, in which operations on the chest could be carried out without fear of the dreaded "acute pneumothorax." Later, Sauerbruch accomplished the same purpose by placing only the head of the patient into a chamber possessing positive pressure instead of negative pressure. One of these large differential pressure chambers was actually constructed in the Thoracic Pavilion of the Lenox Hill Hospital, New York City.

To Meltzer,[5] another practical American, goes credit for introducing in 1910 intratracheal insufflation under positive pressure. The method has been improved by many anesthetists, chiefly by Waters of Wisconsin, so that now the surgeon may trespass the thoracic cage at length without fear of pressure changes or mediastinal flutter.

Pulmonary suppuration as a broad term may include many pathological entities depending on the causative organisms and the stage of the disease. Abscesses may be putrid or non-putrid, depending on the presence of anaerobic organisms. Gangrene of the lung is really an acute, diffuse, unlocalized anaerobic infection. Abscesses may be called chronic after failure to heal in six weeks, but as Moore[6] of New York points out, it is more practical in regard to treatment analysis to classify them as uncomplicated, or, complicated by excessive fibrosis and bronchiectasis, multiplicity of cavities or bronchopleural fistula and empyema. A discussion of pulmonary suppuration should not omit those interesting cases of atelectasis and bronchiectasis resulting from occlusion of the bronchus by adenomata or localized cicatrization and stenosis of a healed bronchitis.

It is a growing surgical impression that an acute putrid pulmonary abscess is a surgical disease from the beginning unless healing progresses quickly. Neuhof[7, 11] of Mt. Sinai was the instigator of early surgical drainage and has treated 127 acute abscesses with only four deaths. This mortality compares quite favorably with that of Park[8] of Buffalo, who in 1887 collected 84 cases of lung abscess, of varying etiology, treated by pneumonotomy with a mortality of 32 per cent. The usually stated mortality with medical treatment is approximately 30 per cent. The mortality of medical treatment of lung abscesses at John Sealy Hospital, including all terminal and moribund cases, is 61 per cent (Table 1). In fairness let it be said that the medical practitioners probably include many poor risks and terminal cases that the

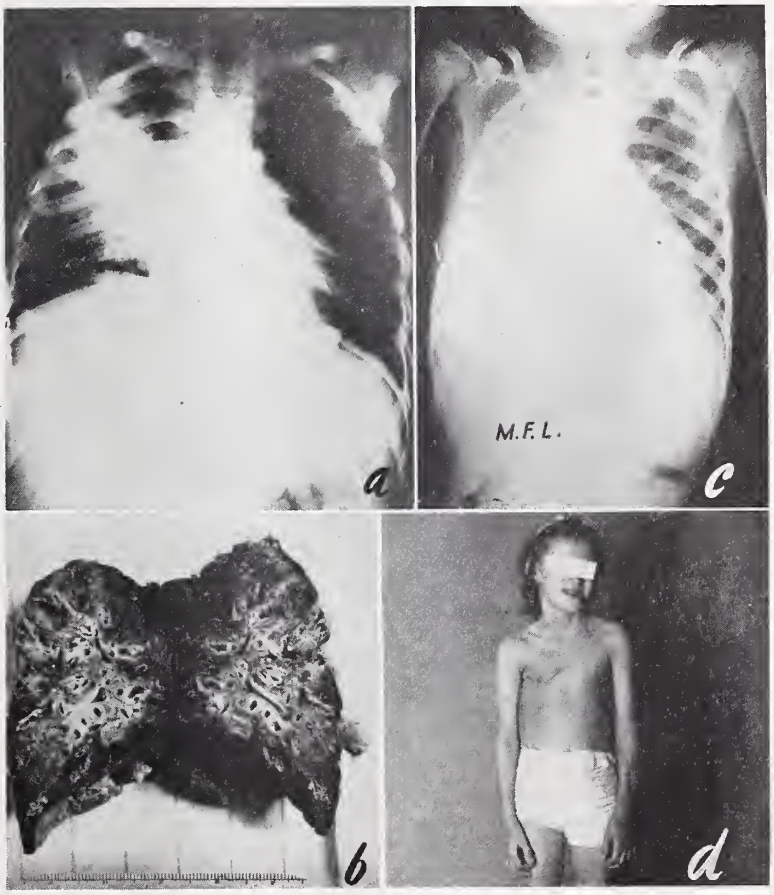

FIG. 2*a*. (Case 4) Roentgenogram made on admission showing extensive consolidation in right lung field.
b. (Case 4) Photograph of sectioned specimen, showing extensive pathologic changes.
c. (Case 4) Chest roentgenogram made two weeks postoperative, showing the usual effusion that accumulates in the dead space after removal of a lung.
d. (Case 4) Photograph 6 weeks postoperative, showing the healed incision.

surgeon would refuse to drain, thus accounting for some of the great variations in mortality. We have had little experience with drainage in the acute stage since our medical and bronchoscopic colleagues usually give their methods of treatment full trials before surgical consultation is asked. This delay is to be avoided since Moore[6] has shown that if one procrastinates and abscesses are allowed to become complicated by fibrosis, bronchiectasis or empyema, the mortality jumps from 9 per cent in the early cases to 33 to 36 per cent in the late cases.

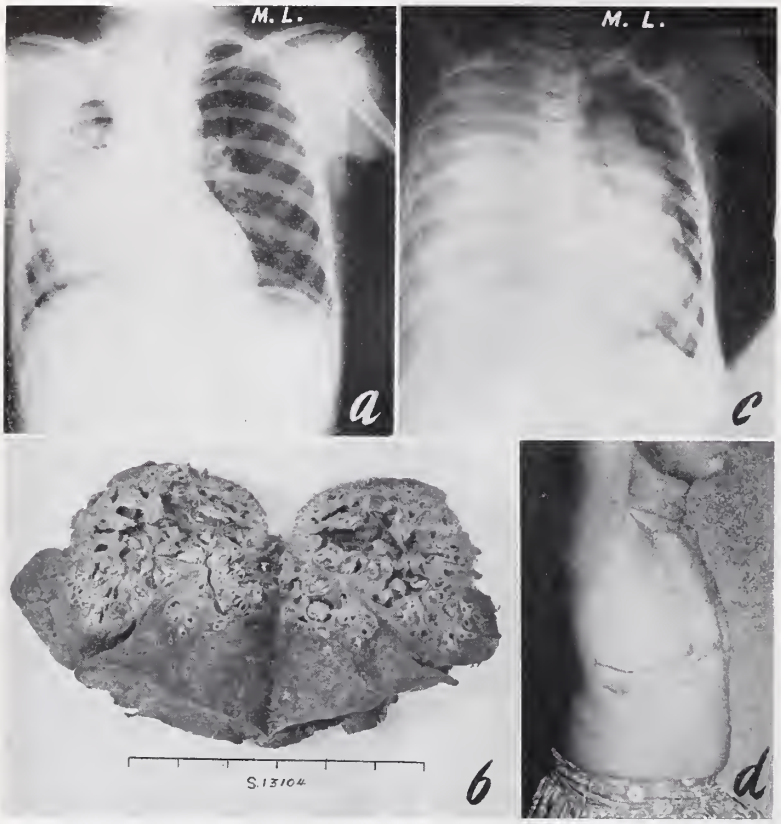

FIG. 3*a*. (Case 7) Chest film showing involvement of most of right lung in suppurative processes and cavitation.

b. (Case 7) Section of lung specimen showing almost complete destruction of most of the lung by suppurative processes.

c. (Case 7) Portable chest film made two weeks postoperative, illustrating common complication. The trachea and mediastinum are pushed entirely into the left chest, with the patient having dyspnea and cyanosis. After aspiration of 300 cc. effusion the mediastinum shifted to the midline and the patient was comfortable.

d. (Case 7) Photograph 8 months postoperative, showing healed incision used for pneumonectomy.

It is occasionally the case that an extremely ill patient with chronic abscess, in whom only pneumonectomy will suffice for a cure, may be so improved by drainage that the more hazardous excision may be later carried out on a much better risk.

Two-stage drainage has been until recently the accepted method of approach to pulmonary suppuration. As early as 1830, Krimer[8] advised vigorous irritation of the non-adherent pleura by powerful caustic, while Godlee suggested multiple punctures; and Barry[9] in 1763, suggested sewing the lung to parietal pleura to cause adhesions. Iodine and iodoform packs came into use in the late nineteenth century. Successful one-stage drainage depends on accurate localization of the involved bronchopulmonary segment by x-ray and its super-imposition on the chest wall where the adhesions are formed.

The technique of accurate localization of lung abscess, so that it may be drained in one stage across the area of viscero-parietal adhesions, is a broad subject in itself. Briefly, one depends first on the history and location of chest pain, which is indicative of all underlying pleuritis, and may also use elicitation of tenderness to deep palpation and percussion as a means of localizing the pleuritis. Bronchoscopic visualization and "spot" localization are also useful.

Good postero-anterior and lateral roentgenograms are by far the most important adjuncts to localization. An exact knowledge of bronchopulmonary segmentation of the lungs is essential for the interpretation of such roentgenograms, since in the sequence of events in the pathogenesis of abscess a certain amount of infective material is aspirated into a certain bronchus. It is the peripheral alveoli serviced by this bronchus that are destroyed by the abscess, and over this periphery that the visceroparietal adhesions form. A knowledge of bronchopulmonary segments and their superimposi-

TABLE 1.—*Ninety-nine Cases of Pulmonary Suppuration.*

	Total	Died	Well
Medical & Bronchoscopic (Includes all moribund acute cases)	67	41 (61%)	26 (39%)
Surgical:	27	8 (31%)	18 (69%)
Lobectomy	5		5 (100%)
Pneumonectomy	7	1	6 (85%)
Drainage	5	3	2
Drainage of empyema and bronchopleural fistula	4	1	2 *
Miscellaneous:	6	3	3
Pneumothorax			
Phrenicectomy			
Thoracoplasty			
No Follow-up	5		
Total	99	49 (52%)	44 (48%)

*One still draining.

tion on the chest parietes is therefore essential for the success of one-stage drainage.

This one-stage method prevents the delay necessary in the two-stage operation and prevents unnecessary destruction of normal pulmonary tissue with its consequences of hemorrhage and air and infective embolism by any more indirect route. It therefore probably deserves the emphasis that experienced thoracic surgeons are placing on it.

Neuhof[7, 11] reserves two-stage drainage only for those erroneously designated "central" abscesses. All abscesses involve chiefly peripheral alveoli, but if the abscess lies near an interlobar fissure, the mediastinum or diphragm, it may only cause interlobar adhesions with no accessible visceroparietal adhesions, thus giving the illusion of being "central." Here two-stage drainage is feasible but Neuhof even then prefers one-stage drainage, utilizing sewing of the lung to parietal pleura as originally advocated by Barry in 1763.

In the so-called chronic or complicated pulmonary suppurations in which conservative measures of postural, bronchoscopic and even surgical drainage have failed to cure, one must look to lobectomy and pneumonectomy for assistance. Certainly the abscess that has become lined by epithelium from the bronchus, or metaplasia of alveolar endothelium cannot be cured by any amount of drainage. Likewise, those cases of suppuration from bronchial obstruction also require excision therapy.

If one examines the lung after removal of a chronic abscess, the thickness of the wall of the scar tissue and indurated tissue about the abscess makes it self-evident that it is hardly possible for these inelastic cavities communicating through large openings into the bronchi to obliterate themselves, even with external drainage. Our experience and the experience of others is that external drainage of long standing abscesses is generally unsatisfactory. It is general knowledge that the superficial portion of the lung must be largely removed, and that the external drainage must be maintained for a very long time; otherwise there is a recurrence of the abscess. In the majority of cases where we have resorted to pneumonectomy, external drainage has previously been used unsuccessfully and nothing was left for the patient but very radical surgery. The patients have been brought to the hospital very septic, expectorating large quantities of pus, as well as discharging pus from the sinuses of previous drainages. If the drainage tube is maintained, there is less pus expectorated and the patient is less septic. As soon as the drainage tube is removed, the pus again appears by expectoration and the septic symptoms recur.

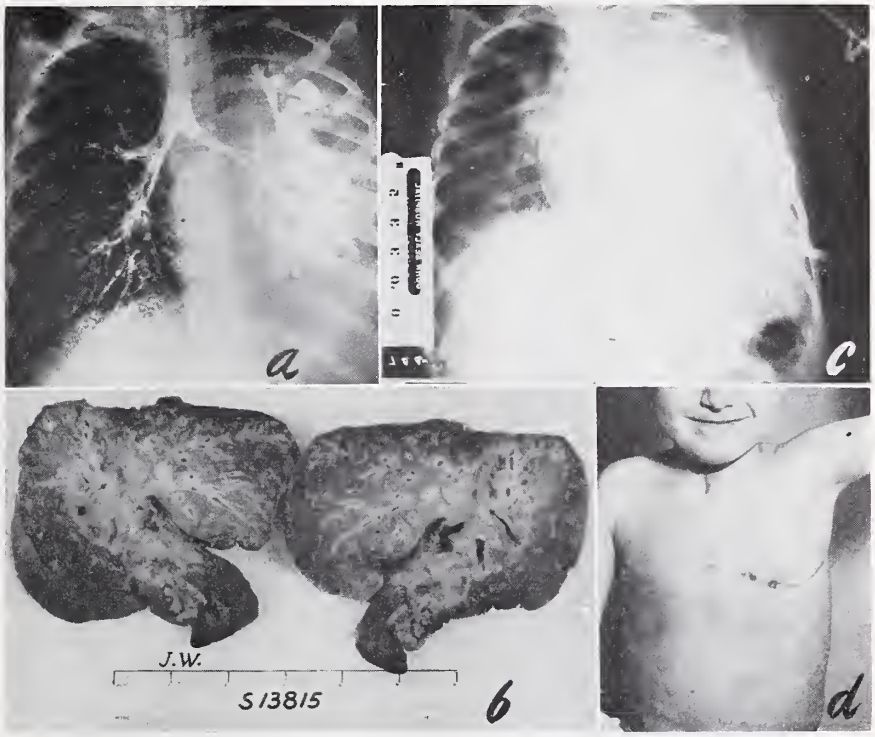

FIG. 4*a*. (Case 9) Bronchogram revealing extensive left-sided bronchiectasia.
b. (Case 9) Sectioned specimen showing extensive pathologic changes.
c. (Case 9) Portable chest film made one week postoperatively, showing tracheotomy tube in place and catheter drainage of left chest.
d. (Case 9) Photograph 4 months postoperative, showing type of incision for left pneumonectomy, practically healed.

Indications for pneumonectomy or lobectomy are: (1) multiple abscesses involving one lobe or multiple lobes; (2) long protracted treatment with bronchoscopic aspiration, postural drainage and chemotherapy without success; and (3) long periods of external drainage without success.

PREPARATION FOR RADICAL SURGERY

1. One should take plenty of time to improve the patient's condition. If external

drainage has been practiced previously it should be reestablished. This can be done by gradually increasing the size of the tubes into the lung cavity.

2. Bronchoscopic aspiration should be carried out in cases that have not been drained externally.

3. Chemotherapy, blood transfusion and careful feeding should be employed.

The temperatures in most of these patients will drop and they will improve in general health until the stage is reached where radical operation may be done with a fair degree of safety.

Indication for Lobectomy.—Lobectomy is used in most cases where the abscess is confined to one lobe, and the other lobe in the left lung, and the two lobes in the right lung are normal, as indicated by lipiodol injection and x-ray study.

Indication for Pneumonectomy.—Pneumonectomy is indicated in cases in which multiple lobes are involved.

OPERATIVE TECHNIQUE

Time will not permit us to discuss the importance of anesthesia in these patients. The success we have had would have been impossible without the anesthetic being in the hands of an expert anesthetist who keeps the patient thoroughly aerated, the trachea and sound lung aspirated and free of secretions at all times. Before the anesthetic starts, bronchoscopic aspiration is practiced to reduce the intrapulmonary secretion to a minimum. Only with complete confidence in the anesthetic can the surgeon devote his best efforts to his part of the procedure.

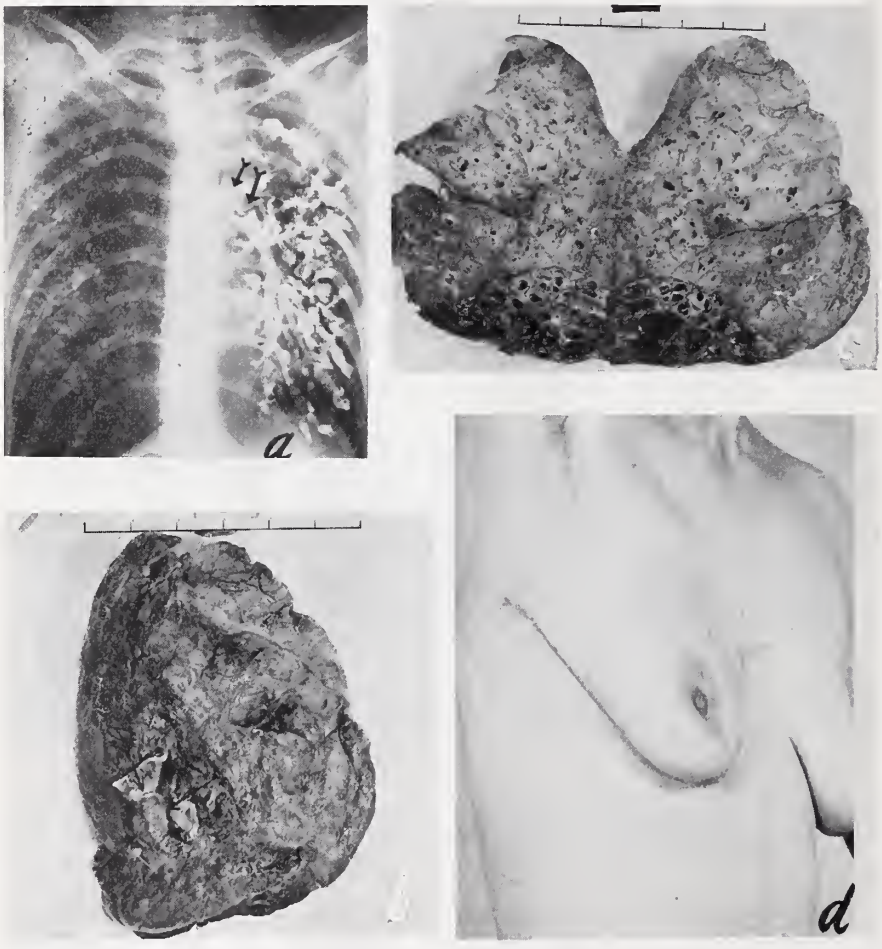

FIG. 5*a*. (Case 10) Bronchogram showing filling defect (arrows) in left main bronchus due to adenoma protruding into the lumen of the bronchus at this point. Note the extensive bronchiectasis as a result of obstruction of bronchial tree.

b. (Case 10) Medial surface of specimen with main bronchus laid open, pinned back to show adenoma outlined by arrows. Note the lower lobe of the bronchus is most obstructed.

c. (Case 10) Sectioned operative specimen showing extensive bronchiectasia. Note that the lowest portion of the lung is most involved due to more complete obstruction by tumor of bronchus draining this lobe.

d. (Case 10) Photograph postoperative showing healed type of incision used to accommodate the female anatomy.

The approach in lobectomy will depend upon the lobe involved. In the upper lobes the anterior approach dividing the intercostal spaces between the third and fourth rib is preferable; while in the lower lobes the posterior incision entering the space between the sixth and seventh rib, or the seventh and eighth, gives the best access. Both in lobectomy and pneumonectomy an effort should be made to dissect the structures, including pulmonary arteries, veins and bronchi, individually with a careful completion of the toilet when finished. In pneumonectomy we prefer the anterior approach for a particular reason, in that one is enabled to reach the hilus of the lung, dissect out the hilar structures individually, doubly ligating each vessel, and severing them; free the main bronchus, and sever it between glands. This can be done before the lung is liberated from the chest

wall. Invariably there are dense adhesions between the visceral and parietal pleuras. If one separates these adhesions before the amputation through the hilus has been done, the loss of blood from the lung surface will be terrific where the adhesions are separated. If this separation is saved for the last it can be quickly done and much saving of blood results.

The attention to the bronchus is all important. It should be cut quite close to the bifurcation of the trachea and very securely closed with many interrupted silk stitches, these stitches closing the end of the bronchus as well as many smaller mattress stitches, bringing its wall together. The stump of the bronchus should be very securely covered with the adjacent mediastinal pleura. Without this measure a bronchial fistula will frequently result.

Postoperative drainage may or may not be used. If there has been considerable soiling or if the bronchus has not been satisfactorily dealt with, intercostal catheter drainage should be done for a period of two weeks under slight negative pressure. If drainage is not used, repeated aspirations of the chest should be practiced subsequently, so that there may not be too much accumulation of fluid in the empty space.

The most hazardous period is about ten days after operation when the bronchus may open up allowing a pneumothorax to develop on the affected side. All attendants should be warned of this danger and proper instruments kept available at all times for paracentesis if necessary.

This paper is based upon the following small group of cases which we have treated.* Five lobectomies and seven pneumonectomies have been done for pulmonary suppuration with only one death. The patient who died was in poor condition and probably should not have been operated on until he had been more improved. The cause of death was not determined. He was turned to the side for the insertion of an intercostal drainage tube after the operation was finished when his heart rather suddenly stopped beating and he could not be revived. The other patients recovered in a satisfactory manner, though some of them were quite ill for several days.

LOBECTOMY CASE HISTORIES

Case 1.—S. H., was a white male, age 42. Illness began with insidious onset four months before admission, with respiratory infection. Three months of conservative management in the hospital brought no improvement. Left upper lobectomy was done with drainage. Drainage ceased and the patient was well five months later.

Case 2.—J. P., was a Negro male, age 31. Illness began with insidious onset with respiratory infection eighteen months before admission. Intermittent periods of chills, fever, and cough productive of two cups of foul sputum per day were common. The weight loss was 27 pounds. Right upper lobectomy was done with drainage. Drainage ceased and the patient was well six months later.

Case 3.—S. M. P., a white girl, age 4, became ill two years before admission, following pneumonia. Cough was usually productive only in the morning. The patient had had two months conservative treatment in the hospital, including sixteen bronchoscopic drainages, after which right lower lobectomy was done. Drainage became necessary two weeks postoperatively but this ceased, and the patient was well in three months.

CASES OF PNEUMONECTOMY

Case 4.—M. F. L., a white female, age 11, had had a productive cough for five months following acute respiratory infection. She entered the hospital in an emaciated, seriously ill condition. The lung was drained surgically, and a series of pneumothoraces were attempted with only partial collapse of the cavities. Right pneumonectomy was done one year after admission to the hospital. Healing was by primary union. The patient is well today.

Case 5.—E. W., a white male, age 40, had an acute respiratory infection four months before admission which failed to heal. He had surgical drainage after four months conservative care in the hospital. He ran a septic course, but after two more months his temperature improved and right pneumonectomy was performed. The patient died immediately after the operation.

Case 6.—R. S., a white male, age 32, became ill with pneumonia eight months before admission. Surgical drainage was done four months before admission. The weight loss was 30 pounds. Right pneumonectomy was done with drainage. The patient was well five months later.

Case 7.—M. L. was a white girl, age 8. The onset of the condition complained of was eighteen months before admission following a respiratory infection. The patient received a diagnosis of tuberculosis and was sent to a sanatorium where a diagnosis of lung abscess was established. The patient was critically ill on admission, weighing 50 pounds, and exhibiting a temperature of 103 F. After nine months of conservative treatment, including over thirty bronchoscopies, right pneumonectomy with drainage was done. Drainage ceased, the patient gained 25 pounds and was well eight months later.

Case 8.—C. D. was a white male, age 30. The duration of the present condition was two years, preceded by respiratory infection. Two surgical drainages had been done one year after onset. There was 50 pounds weight loss. A right pneumonectomy without drainage resulted in primary healing.

Case 9.—J. W. was a white male, age 6. The present condition was of one year's duration, following acute respiratory infection. The average twenty-four hour sputum was one-half to three-fourths cup with occasional hemoptyses. Left pneumonectomy with drainage was done four months ago. Laryngeal edema necessitated tracheotomy postoperatively. The patient still has a small amount of external drainage.

Case 10.—B. M., a white female, age 31. had had a cough which began nine years previously. For seven years she had intermittent attacks of chills and fever and hemoptysis. Six years before admission she received a diagnosis of carcinoma of the bronchus, and had had bronchoscopic cauterization and a series of x-ray treatments. For the past two years she had had bronchoscopic drainage every two weeks. It is now three weeks since a right pneumonectomy was done and healing is primary.

*Authors' Note.—Since this article was submitted for publication two lobectomies and three pneumonectomies have been done with one death.

SUMMARY

Pulmonary suppuration is a very serious condition and should be considered surgical from its beginning. Many patients recover without surgical intervention; on the other hand, surgical intervention delayed too long may result in a chronic abscess, which is more difficult to cure.

Neuhof's work and teaching that early surgical drainage would prevent chronic abscesses and reduce the mortality far below that of any other remedy cannot be ignored. We have not had an opportunity to see these patients and drain them early as advocated by Neuhof. Those cases that have become chronic and resisted other methods of treatment may be cured only by lobectomy or pneumonectomy.

REFERENCES

1. Brock, R. C.: Observations on the Anatomy of the Bronchial Tree with Special Reference to Surgery of Lung Abscess, Guy's Hosp. Rep. 91:111-130, 1942.
2. Coleman, F. P., and Seastrunk, J. G.: Technic of Individual Ligation in Pneumonectomy and Extramediastinal Individual Ligation in Lobectomy, South, Surgeon, 10:491-509 (July) 1941.
3. DeBakey, M., and Ochsner, A.: Surgical Treatment of Bronchiectasis, Dis. Chest, 9:63-78 (Jan.-Feb.) 1943.
4. Garre, C., and Quincke, H.: Surgery of the Lung, Baltimore, Wm. Wood & Company, 1912.
5. Meyer, W.: A Review of the Evolution of Thoracic Surgery Within the Past 14 Years, M. Rec. 95:761-769 (May 10) 1919.
6. Moore, R. L.: Pulmonary Abscess—Surgical Problems; Classification of Cases and Discussion of Surgical Treatment, Ann. Surg. 116:373-386 (Sept.) 1942.
7. Neuhof, H., and Touroff, A. S. W.: Acute Putrid Abscess of the Lung; Principles of Operative Treatment, Surg., Gynec. & Obst. 63:353-358 (Sept.) 1936.
Idem: Acute Putrid Abscess of the Lung; Surgical Treatment and Results in 86 Consecutive Cases, J. Thoracic Surg. 9:439-449 (Apr.) 1940.
Idem: Surgical Treatment by Drainage of Subacute and Chronic Putrid Abscess of the Lung, Ann. Surg. 113:209-220 (Feb.) 1941.
8. Park, R.: Surgery of the Lungs, Ann. Surg. 5:385-460 (Jan.) 1887.
9. Ramsay, A. C.: Contribution to Pulmonary Surgery with Report of 4 Cases of Pneumonectomy, Ann. Surg. 11:34 (Jan.) 1890.
10. Reinhoff, W. F.: Pneumonectomy; Preliminaary Report of Operative Technique in Two Successful Cases, Bull. Johns Hopkins Hosp. 53:390-393 (Dec.) 1933.
11. Touroff, S. W., and Neuhof, H.: Differentiation between Acute Putrid and Nonputrid Abscess; Its Significance in Relationship to Therapy, J. Thoracic Surg. 10:618-624 (Aug.) 1941.
Idem: Acute Putrid Abscess of the Lung; Roentgenographic Features, Surg., Gynec. & Obst. 68:687-698 (March) 1939.

ABSTRACT OF DISCUSSION

Major Donald L. Paulson,* San Antonio: I have been very happy to hear this paper on pulmonary resection for chronic lung abscess by Dr. Singleton and Dr. Knight. The treatment of lung abscess has gone through a rather marked metamorphosis in the last ten years. One stage drainage for lung abscess, as advocated by Dr. Neuhoff, constituted a definite contribution to the surgical treatment of lung abscess. As it became apparent that pulmonary resection could be carried out with a low mortality, lobectomy and pneumonectomy for lung abscess has become more frequent. The figures which Dr. Singleton and Dr. Knight have given for the mortality of lobectomy and pneumonectomy for chronic lung abscess are in evidence of the fact that pulmonary resection may be carried out with a reasonably low mortality even under adverse conditions. There is definitely a place in the surgical treatment of lung abscess for open drainage. Any lung abscess which does not show signs of healing within the first four to six weeks after the onset of the abscess should be considered for surgical treatment. If the abscess is seen early during the acute and subacute stage, open drainage may be readily and satisfactorily carried out. Those abscesses which become chronic are usually multilocular. There may be multiple cavitations, and bronchiectatic changes are frequently present. It is in those cases with multiple cavitations with secondary changes in the bronchi that pulmonary resection is most desirable.

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CARCINOMA OF THE VULVA

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E. L. HUNT, M. D., F. A. C. S.
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"Carcinoma of the vulva is a rare disease." "Carcinoma of the vulva is not a rare disease."

These two conflicting statements are quotations from the opening paragraphs of different articles on the subject recently reviewed. Both of these statements probably are correct in that rarity of the condition does vary in the experience of various investigators. Its incidence in the larger clinics, where accurate records and statistics are available, seem to indicate that the ratio of vulval cancer to cervical cancer is about one to twenty-five. Squamous cell cancer probably occurs about four times as frequently as does adenocarcinoma in the same area. Of the adenocarcinoma group, about one-third may be expected to be papillary carcinomata, which, as a rule, are slow to metastasize and are often cured by simple excision.

Carcinomas of the vulva are classed roughly into four groups, according to structure of origin:

1. Epidermal, having origin in the skin structure about the vulva.
2. Clitoris, which is quite rare.
3. Vestibular, arising from the mucous membrane of the vulva.
4. Bartholin, which group have as their origin the glandular tissue of Bartholin glands.

It has been generally observed that cancer of the last three groups is ordinarily more malignant than that which arises primarily from the epidermis though, in general, they are a bit less frequent.

Cancer of the vulva is most common in the sixth and seventh decades, but may occur at any age.

There seems to be no evidence leading us to suspect the disease more frequently in married than in single women or in multipara than in nullipara.

The only predisposing factor seems to be pruritus, since about 40 per cent of patients with the disease give a history of pruritus, and itching is the most common single symp-

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tom. Ulceration may appear at any time in the course of the disease.

Early diagnosis is important, as is the case with cancer in any area and patients with pruritus especially should be cautioned to have frequent and careful examinations.

Some pain is usually present, and some discharge is usually encountered.

Lesions may be superficial or deep and may or may not be easily identified.

Syphilis and tuberculosis are the two conditions which are most likely to be confused with carcinoma in this area. Often biopsy is necessary to be sure of the diagnosis.

A few anatomical facts in regard to the lymph drainage of the area must be borne in mind:

1. It has been definitely shown that there are free communications between the two sides so that the uninvolved side of the vulva should be excised, as well as the involved side.
2. The lymph drainage from the anterior two-thirds of the vulva is to the superficial and deep inguinal glands first, then to the glands in the femoral canal and finally along the iliac vessels to the interior of the pelvis.
3. The drainage from the clitoris is directly into the deeper tissues.
4. The posterior one-third of the vulva tends to drain to the perirectal glands. This fact is well demonstrated by the very common extension of lymphogranuloma inguinale to the perirectal area with adenitis and rectal stricture.

Treatment of carcinoma of the vulva should be dependent on the type of lesion and its location, as well as upon its degree of involvement, and individualization of treatment offers much more than does any set routine procedure. Certainly, early treatment offers more chance of cure than does late treatment and adequate excision plus destruction of avenues of spread gives more hope of cure than does palliative treatment. Some type of radical or semiradical vulvectomy with excision of the inguinal and femoral glands offers a chance to cure especially in the squamous cell group of cancers.

McKelvey and McLennan, of the University of Minnesota, presented a study of 40 cases treated by various combinations of vulvectomy, with or without gland excision, and with or without radiation therapy as supplementary treatment. They concluded that the location and amount of involvement of structure gave a good index as to the more or less radical handling of the case, indicating that the more radical intra-abdominal excision of structures carries a higher risk to these elderly patients than is justified by the chance of cure. They stressed the importance of bilateral resection of both the vulva and bilateral excision of the inguinal and femoral glands with radiation of those that showed evidence of glandular involvement. They showed in their series that differentiated tumors tend to remain localized a relatively long time before the spread from the superficial and deep inguinal to the femoral and iliac vessels.

It is almost universally accepted that vulvectomy should be done in two stages. Stage one consists of radical removal of the labia and structures of the prepubic region on both sides. The incision necessarily will vary considerably with the type and location of the lesion, but it might be stated that it should include normal skin surrounding the lesion and that the skin should be considerably undermined bilaterally to remove all of the deep lymphatic bearing structures. Bleeding must be carefully controlled. It is not advisable to go too close to the external urinary meatus because this will interfere with urination after scar tissue has retracted. An indwelling catheter is placed in the bladder for a few days after the operation. Relaxing incisions are usually needed to close the wound without too much tension. Ten days to two weeks should be allowed for complete healing of the vulval incision before the second stage is begun, and it is desirable to use the perineal heat lamp frequently during the convalescence following the first stage of the operation.

After the vulval incision has thoroughly healed and is dry, the second stage of the operation is done. Inguinal incisions are made slightly above the inguinal ligaments and crossing them about the middle. It is important, in avoiding infection, not to allow the inguinal incisions to come in contact with the first incision. All of the superficial node-bearing fat is removed and the deep facia is thoroughly cleaned in the regions of the inguinal nodes and also about the femoral ring. The inguinal canal is then opened, as in a hernial incision, and the fat and nodes are removed from the canal. This may require partial excision of the round ligaments. The femoral canal is then investigated and cleaned. If necessary to accomplish this, the inguinal ligament may be divided in order to thoroughly reach the femoral canal and clean it. The inguinal ligament is then sutured together, the internal oblique muscle and conjoined tendon are sutured to the inguinal ligament and the external oblique is closed by overlapping such as in hernial repair.*

REFERENCES

1. Adair, F. L.: Obstetrics and Gynecology, Philadelphia, Lea & Febiger, 1940.
2. Crossen, H. S., and Crossen, R. J.: Operative Gynecology, St. Louis, C. V. Mosby Company, 1938.

*Editor's Note.—The paper was illustrated by a motion picture.

LIBRARY OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA

3. Claiborn, L. N., and Holsinger, H. B.: Basal Cell Carcinoma of the Vulva, Surg., Gynec. & Obst., 54:836-838 (May) 1932.
4. Emmert, M.: Carcinoma of the Vulva, Nebraska M. J. 10: 216-218 (June) 1925.
5. Frank, L., and Miller, A. J.: Malignancy of the Vulva, Am. J. Surg. 53:412-416 (Sept.) 1941.
6. Hoffman, P. E.: Malignancies of the Vulva, Am. J. Obst. & Gynec. 33:60-67 (Jan.) 1937.
7. McDonald, J. R., Lovelady, S. B., and Waugh, J. M.: Adenocarcinoma of the Vulva, Am. J. Obst. & Gynec., 42:304-309 (Aug.) 1941.
8. McDonald, J. R.: Apocrine Sweat Gland Carcinoma of the Vulva, Am. J. Clin. Path. 11:890-897 (Dec.) 1941.
9. McKelvey, J., and McLennan, C. E.: Carcinoma of the Vulva, Bull. Univ. Minnesota 10:194-201 (Jan. 20) 1939.
10. Rentschler, C. B.: Primary Epithelioma of the Vulva, Ann. Surg. 89:709-730 (May) 1929.
11. Schreiner, B. F., and Wehr, W. H.: Cancer of the Vulva, with a Report of 118 Cases, Surg., Gynec. & Obst. 58:1,021-1,026 (June) 1934.
12. Stein, A.: Primary Carcinoma of the Vulva, Am. J. Obst. 74:577-596 (Oct.) 1916.
13. Taussig, F. J.: Primary Cancer of the Vulva, Vagina and Female Urethra; Five Year Results, Surg., Gynec., & Obst. 60: 477-478 (Feb. No. 2A) 1935.

ABSTRACT OF DISCUSSION

Dr. Allen T. Stewart, Lubbock: The authors are to be congratulated for this timely paper, the first I have ever heard on the subject, and for their skill in photographic presentation.

I am inclined to regard carcinoma of the vulva as a rare disease. In the past twenty years I recall only one case to come under my observation. If it is rare, it is all the more important that it not be overlooked.

I cannot add anything to this excellent presentation, but I think it in order to emphasize a few points:

1. Carcinoma of the vulva is relatively slow in developing.

2. The majority of the lesions, being of the squamous cell type, are not so malignant and are amenable to treatment both by surgery and radiation. The adenocarcinoma group, especially the papillary type, are slow growing and metastasize late.

3. The prognosis is fairly bad for radical surgery, because the carcinomata occur late in life. However, early vulvectomy, as illustrated here, followed later by extirpation of the inguinal and femoral glands, offers hope of cure, provided metastases have not advanced to the iliac glands. While the authors did not mention it, I would be inclined to forego the pelvic operation in that event and rely upon deep x-ray therapy to those glands, because the patient is usually of such an age that laparotomy might be too great a risk. I feel sure that the choice of the procedure would depend upon the individual case.

In summary, early diagnosis, biopsy if necessary, radical removal of all diseased tissue and gland bearing areas, followed by radiation, offer the only hope of cure.

193,000 PINTS OF BLOOD FLOWN TO WOUNDED

Combined figures on East and West coast flights of whole blood to the war theaters reached 193,000 pints in March according to the Office of The Surgeon General. Since the start of the blood-flying program over the Atlantic last August, 150,000 pints of whole blood have been flown from the East Coast to the European Theater. This service has made it possible for a wounded man to get blood within twenty-four hours after it was drawn from a donor here. Shipments now average about 1,200 pints a day, which provides transfusions for 300 to 400 average cases.

Whole blood shipments being flown from the West Coast to the Pacific Ocean Area have totaled 43,000 pints since the inauguration of the service last November.

Continued donations of type "O" whole blood are necessary to maintain this life-saving service.—*S. G. O. Notes*, March 31, 1945.

DIVERTICULITIS OF THE COLON

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It is fully appreciated that no discussion of this subject is complete without a full evaluation of the very favorable results obtained by non-surgical methods of treatment in many patients with uncomplicated diverticulitis. This discussion however must omit this very important phase of treatment and deal only with its surgical aspects. Since in from 75 to 80 per cent of instances, diverticulitis of the colon involves the sigmoid alone, or the sigmoid together with the descending colon, these remarks are confined to the disease as it occurs in these locations.

Basically the indications for surgical intervention are dependent upon the development of an inflammatory reaction in and around one or more isolated diverticula, or in a segment of bowel the site of multiple diverticula. This inflammatory reaction with a varying degree and virulence of infection, initiates the pathologic process responsible for the symptoms. These commonly are relieved repeatedly by non-surgical measures, but if they are sufficiently severe and persistent they usually present complications that demand surgical intervention.

The single diverticulum tends to be flask-shaped with the neck and opening into the lumen of the bowel much smaller than the diameter of the sac itself. Thus exists a mechanical deterrent to the expulsion of fecal material which enters the sac. Consequently, fecaliths remain over a long period of time with resultant damage to the mucosa lining the wall of the sac and possible impairment, by constant irritation, of the blood supply to the sac wall. Sudden perforation, explainable on this basis, may occur. Of course frank perforation is not necessary to the initiation of a local inflammatory process involving the peritoneum surrounding the diverticulum, any more than it is to the inception of an inflammatory reaction about the unruptured appendix. The virulence of the infectious element may be slight, yet with the thin wall of the sac, the edema and possibly impaired blood supply, an acute gangrenous inflammation leading to a localized or generalized peritonitis may result; or the process may run a chronic course with latent acute exacerbations. The process may involve one or more diverticula individually.

The adjacent bowel wall is very likely to undergo a concomitant reaction. As a result of the chronic low grade inflammatory pro-

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cess, a marked hyperplastic reaction occurs and may completely surround the bowel through several inches of its length. This process occurs chiefly in the sigmoid flexure and, by common usage, largely has come to be the clinical lesion designated by the unqualified term diverticulitis. It causes the bowel wall to become markedly thickened and constricted, with resultant narrowing of the lumen of the bowel and, together with the possible inflammatory reaction in the fat of the appendices epiploicae, accounts for the frequent tumefaction. This process was described first in 1911 by Wilson, who applied to it the term peridiverticulitis.

With these elements of underlying pathologic changes in mind, it becomes easier to visualize the complicating developments that require surgical intervention. Spontaneous rupture of a diverticulum located in a mobile part of the bowel into the free peritoneal cavity is extremely rare. More often the inflamed diverticula cause the bowel to adhere to the lateral or anterior abdominal wall or to the wall of a viscus, frequently the urinary bladder in males, and should rupture occur the likelihood is great that a left lower quadrant abscess will form. After such a process, and perhaps with the degree of obstruction playing some part, fistulas frequently occur. Opinions vary as to the proper method of dealing with these acute perforations with or without abscess. Following acute perforation, the question of whether to attempt to close the opening and drain the abdominal cavity or to wait with the hope that an abscess will form and allow later surgical drainage with diminished danger, can be argued pro and con just as it is when applied to appendical perforation. Once it is decided that the abdomen it to be opened, the simplest drainage procedure with the minimum amount of manipulation should be done; and any attempt to correct the underlying cause of the process should be deferred until the inflammatory reaction has subsided.

Apart from the foregoing phase of the disease, is the more commonly encountered clinical type, classified by Mayo as self-limiting diverticulitis and peridiverticulitis, which follows the pathologic features described by Wilson under the latter term. This form of the disease is characterized by recurrent attacks of pain, low grade fever, some alteration in bowel habit, more often tending toward constipation, abdominal distention and commonly symptoms referable to the urinary bladder, such as frequency and dysuria. Pain is perhaps the foremost and most constant symptom. It is located in the left lower quadrant of the abdomen and is usually intermittent and cramping in character. Its severity is variable, depending upon the acuteness of the inflammatory process and the degree of obstruction. Some degree of tenderness is usually present over the lesion, although a palpable mass can be demonstrated in only about one-half of the cases.

It is not intended to imply that this clinical picture in itself constitutes justifiable grounds to advocate surgical interference, since the vast majority of patients presenting such symptoms will respond well to intelligent medical management. In some instances, however, regardless of the effort put forth to prevent them, these acute exacerbations recur, which, if sufficiently frequent and severe, with a marked degree of obstruction, make the consideration of some surgical procedure imperative. Particularly is this true in those instances where bladder symptoms are prominent even though the other features be of comparatively mild nature.

Here, it may be stated in passing, that with the competent sigmoidoscopic and roentgen-ray examinations now available, the differentiation of diverticulitis and carcinoma does not present the problem that formerly it did. Certainly when any doubt exists, surgical interference is indicated and justified.

The present day tendency is toward conservatism in the surgical treatment of complicated diverticulitis and undoubtedly it is safer and better to perform only a temporary colostomy as the first step. Possibly the only exception to this rule is in those comparatively rare instances where a relatively short segment of bowel is involved, where the degree of obstruction and inflammatory reaction is minimal, and some form of the Mikulicz procedure can be accomplished. Doubt may be raised here then as to whether a lesion of this little severity may not warrant continued non-surgical management.

Preliminary cecostomy has been advocated in those patients presenting total or almost complete bowel obstruction, although this problem is less frequently encountered with diverticulitis than where cancer is the obstructing lesion. Our experience with a cecostomy in patients with complete colon obstruction from left sided lesions, has been almost wholly unsatisfactory. First, because of the great difficulty in opening the hugely distended cecum without considerable soiling, and, second, and perhaps of more importance, is that preparation of the colon above the lesion for subsequent surgery is almost impossible. Seldom is one unable to establish a loop colostomy in the transverse colon. This may be opened quite early if the need for relieving the obstruction is immediate; and subsequent irrigation of the distal loop can be done effectively.

Even in the absence of acute obstructive features, when a planned surgical approach can be made, the transverse colon remains the site of choice for preliminary colostomy since any manipulation of the diseased segment is not without some hazard and, too, a sufficient length of the descending colon may not remain after colostomy there to allow subsequent secondary procedures.

Justifiable objections commonly raised to a colostomy in the transverse colon are: the liquid character of the bowel content at that level with resultant excoriation of the skin surrounding the colostomy; more difficulty for the patient in regulation and a greater chance of leakage following later surgical closure. The technic for colostomy in the transverse colon described by Devine largely eliminates these objections and has the added advantage of allowing no fecal material to enter the distal stoma. Secondary closure of the Devine colostomy, however, especially the application of the special clamp, has not proved easy in our personal experience with it, and we feel that its application blindly to the intra-abdominal spur between the loops of the transverse colon is not free from danger. We have practically abandoned its use.

Following colostomy and diversion of the fecal current, the peridiverticulitis and the accompanying perisigmoidal inflammatory reaction will subside. This resolution, always accelerated by hot irrigation through the distal stoma and the rectum, is in some instances so complete, as evidenced by roentgen-ray examination of the bowel, that one is tempted to consider closure of the colostomy without further surgical interference. Indeed this has been the procedure of choice in many cases after the colostomy has been open for at least twelve to twenty-four months. Accumulating experience is beginning to show however that recurrence of symptoms is sufficiently great, following this method of treatment, to make resection of the involved segment of bowel with end-to-end anastomosis the more rational procedure.

In dealing with the more serious complications of peridiverticulitis such as fistulas, it is even more important that preliminary colostomy be done. The intervening period of resolution of the inflammatory process will vary from a few weeks to several months, depending upon its original severity. When this reaction has reached a minimum, resection of the fistulous tract with closure of the secondary opening, if this is in the bladder, and resection of involved segment with end-to-end anastomosis can be done with the least possible risk.

Once a fistula is established, it becomes imperative that the fecal current be diverted promptly by colostomy, because of the attendant danger of serious complications. This is especially true of a communication between the bowel and the bladder, which may result in a very troublesome cystitis or an infection ascending to the kidney.

In summary, it may be stated that in patients with complications of diverticulitis which constitute the indications for surgical treatment, the formation of a preliminary colostomy is the procedure of choice. This should be in the transverse colon, preferably to the left of the midline and with a double stoma and spur which may later be closed by the application under direct vision of crushing clamps. After sufficient resolution of the inflammatory mass, resection of the diseased segment with end-to-end anastomosis is favored.

Radical surgical procedures without preliminary colostomy for chronic lesions and injudicious exploration and manipulation for acute perforations and abscess formation result in an extremely high mortality rate.

REFERENCES

1. Rosser, C., and Kerr, J. G.: Diverticulosis and Diverticulitis, in Portis, S. A.: Diseases of the Digestive System, Philadelphia, Lea and Febiger, 1941, pp. 899-915.

2. Rosser, C.: The Changing Concept Concerning the Surgical Management of Diverticulitis, Virginia M. Monthly 70:433-435 (Sept.) 1943.

3. Wilson, L. B.: Diverticula of the Lower Bowel: Their Development and Relation to Carcinoma, Ann. Surg. 53:223-231 (Feb.) 1941.

Medical Arts Building.

ABSTRACT OF DISCUSSION

Dr. O. J. Potthast, San Antonio: I shall not attempt to discuss diverticulosis. This Dr. Kerr has ably done within his alloted time. I wish to call attention to a technic of crushing the spur on a Mikulicz colostomy, which is more comfortable to the patient and, I believe, carries less risk of perforation and consequent peritonitis, especially when crushing the bottom of the spur. I use a spring clamp designed by Gant for use on overdeveloped rectal folds. A cord tied to the clamp and fastened to the skin with a strip of adhesive prevents the clamp from slipping down the gut. The elastic pressure of the spring clamp I believe will cause firm adhesion of the contiguous surfaces of the two loops of gut before the clamp cuts through the spur. It is especially useful when getting rid of the last bit of the spur.

SPORT FILMS IN ARMY HOSPITALS

Sick and wounded soldiers will be able to "attend" big league baseball games, championship prize fights and basketball games played by the Big Ten—while they are being brought home on hospital ships or are patients in an Army hospital. The Office of the Surgeon General has announced that movies of major events in the world of sports are being made an integral part of the Army's reconditioning program. Through the coöperation of the Information and Education Division, Headquarters Army Service Forces, these sport films are now being distributed to Army hospital and hospital ship film libraries.—S. G. O. Notes, February 28, 1945.

FACTS THAT SHOULD BE KNOWN ABOUT ALLERGY

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Although the term "allergy" is frequently used in lay as well as medical literature and conversation, there are many facts which should be commonly known but are not generally recognized. Without going into any technical discussion nor interesting ourselves in questions involved in the mechanism underlying the manifestations of allergy, I should like to present a few bits of knowledge which have been accumulated by workers in the field and which, if kept in mind by workers in other fields, may be of diagnostic and therapeutic value.

1. Allergy usually develops in early life, and although it frequently persists into old age, seldom begins then. As one becomes older his chances of becoming allergic are progressively less. I have seen true asthma develop in elderly people but this is so uncommon that it is a good rule to remember that dyspnea developing after middle age, in one who has had no previous allergic manifestations, is far more likely to be the result of cardiac disease than of asthma. In my own experience I think not more than 5 per cent of those developing dyspnea after 50 are asthmatic. It is well to remember that cardiac disease after that age is common while true asthma developing after that age is rare.

2. Parents frequently are told that they should not worry about their children's allergy since it will disappear as they grow older. This does happen but it is the exception rather than the rule. All of us see persons who have had some form of allergic condition in earlier years and, after varying periods, have lost it. But, if one watches patients over a period of years, he finds that the number spontaneously recovering is small; the others continue to show their allergic symptoms until something is done about it. My own estimate, which is nothing but an estimate, is that not more than 10 per cent recover spontaneously. Certainly, this is too small a percentage to depend upon.

3. Many interesting, bizarre and even ludicrous stories have been told of those who have become sensitive to unusual and bizarre things. Everyone working in the field of allergy has some such stories to tell. But they are the unusual and not the common findings. People usually become sensitive to those things which are commonly found in their diet or environment. Not infrequently I am asked how one can hope to find the cause of allergy when there are thousands of possible factors to consider. The answer is that while theoretically one may become sensitive to any one of a vast number of things, actually the number which cause almost all clinical allergies is small. Recently I made up for one of our army camps a set of testing extracts in which I included only 80 antigens. With this group I sent the statement that a capable worker could find, with this group, at least 95 per cent of the reactions that could be found with a diagnostic armamentarium of several hundred extracts. It may be necessary for the specialist to have available a large number of antigens so that he may find the occasional unusual factor but rarely do we find significant reactions outside of a comparatively small group.

4. If the above is true, it follows logically that many people become sensitive to the foods which they like the best and to environmental factors to which they are frequently exposed. It is true that occasionally one finds a food dislike which apparently is based on a sensitivity to the food but this is not a dependable assumption to make. I have seen a few children who had an intense dislike for spinach and were found sensitive to it but I have seen many more who ate spinach with relish who had become allergic to it.

5. We see a great many patients and some physicians who try to explain a recently developed allergy on the basis of some food which has been newly added to the diet or some new factor in the environment. More often we find them sensitive to food or environmental factors to which they have been exposed for years. It is the patient and not the diet or environment which has changed. As a matter of fact, there is a lapse of time or incubation period, before the development of allergic manifestations. Immigrants from Europe where ragweed is not found do not develop ragweed hay fever on their first exposure to the pollen but may on subsequent exposures. Recent experience with sulfathiazole ointment demonstrates that those who develop generalized eruptions because of sensitiveness to it do so only after an incubation period of nine or ten days. Many of the industrial dermatoses appear only after exposure of months.

6. Changes in weather, a cold, emotional disturbance or fatigue may, as nonspecific factors, precipitate attacks. Failure to appreciate this fact has led to the belief that climatic conditions alone or emotional upsets may be the sole cause of asthma. It also makes it difficult to determine if some particular substance is responsible for the attack for, on one occasion, asthma may develop

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subsequent to the eating of egg while at a subsequent time egg may be ingested without symptoms. Or a patient may be sensitive to feathers and sleep on feather pillows every night while having asthmatic attacks only at intervals. The explanation for this probably lies in the fact that most patients are only moderately or slightly sensitive to the antigen and, when other conditions are favorable, can tolerate the usual exposure without symptoms. Given the usual exposure plus a change in weather, a cold or emotional upset, clinical symptoms are quite likely to ensue. There is the occasional patient who is so sensitive that an exposure to the proper antigen will produce an attack regardless of any other conditions but these people are comparatively few. Recognition of the role played by these nonspecific factors will aid greatly in explaining many problems.

7. Mothers of asthmatic children who are thin and under weight frequently ask about the possibility of the development of pulmonary tuberculosis in the asthmatic child. I have seen few adults and no children in whom tuberculosis and asthma were coexistent. I have seen a few adults in whom both conditions were present but, in almost every instance, it was possible to prove that the tuberculosis antedated the asthma. The reverse seems to be quite uncommon. Whether this observation is generally true, I do not know.

8. I think there is some unnecessary worry about the hay fever patient developing asthma in later life. A great many children with eczema do later develop some form of allergy and some patients with allergic rhinitis do become asthmatic but I rarely see a patient with pollen hay fever who loses his hay fever and develops asthma. Pollen sensitivities seldom change and those who suffer from seasonal hay fever do not, by any means, become asthmatic.

9. Multiple sensitivity is, of course, the rule. Sometimes we see patients who have had their sensitivity only a short time and are found to be clinically sensitive to only one thing. With the passing of time they tend to develop other sensitivities and the chronic allergic is almost without exception sensitive to more than one antigen. I am just as certain, however, that patients are not sensitive to large numbers of things as some workers would have us believe. Not long since I was shown a list of eighty substances to which a patient was said to be sensitive. In spite of all her efforts to avoid these things, she still had asthma. Proper care and treatment for three sensitivities gave her satisfactory relief. I think this error is the result of the misinterpretation of tests. There are some workers who seem to think that a wheal of a certain diameter constitutes a reaction and make their diagnosis and therapeutic recommendations accordingly. As a matter of fact, to interpret reactions properly one must establish a normal for each patient. It is not a matter of absolute but relative size which is of importance. One person may produce a wheal 1 cm. in diameter to all but a few injections and with these few the wheals may be 2 or 3 cm. These latter will be the only significant reactors. On the other hand, another patient may show practically no whealing to any injections save one or two which may be as much as 1 cm. in diameter. These latter would, in this person, be significant reactions. In other words, what would be called a reaction in one might be considered normal in another. If reactions are read on this basis the long lists of reactions disappear and one gets readings which are entitled to respect.

10. Sensitivities may change but there is much misunderstanding about this possibility. An infantile eczema may be succeeded by asthma or an allergic rhinitis may disappear as asthma develops. But one seldom loses a pollen sensitivity save as the result of treatment, and while food sensitivity may be lost this is usually as a result of continued abstinence from the food and usually requires some time. An egg sensitive patient who abstains from all egg for a period of months will probably lose his sensitivity and, since the allergic person has the tendency to become sensitive, may develop a sensitiveness to another food but this does not occur in days or weeks but is a matter of months. I had the unique opportunity of watching a woman develop one sensitivity after another to dusts to which she was exposed in her occupation. The shortest time required for the development of a new sensitiveness was nine months.

11. There are still a few who advise a change of climate for the asthmatic. There are two types of patients who may be helped by a change in location. The person with asthma and chronic bronchitis is made better by a warm dry climate chiefly, I think, because his bronchitis improves. The patient who is sensitive to some pollen and can go to a locality where that pollen is not encountered will lose his symptoms. The child who is sensitive to a cat or dog will be well if his change in location means a separation from the pet. But food sensitive persons and those sensitive to the usual environmental factors are helped only if the substances to which they are sensitive are avoided. Unless one knows from what he is running away his move is a

desperate gamble; if he does know, he should be able to take care of it at home. Then, also, since the allergic person has the tendency to become sensitive, he may lose his hay fever or asthma in a locality where the pollen which caused his trouble is not encountered but, in the course of time, he may become sensitive to some pollen in the new location and his latter state may be as bad as the first.

12. There are three methods of testing in common use: the scratch, the intracutaneous and the patch method. Briefly, it may be said that those who restrict their testing to the scratch method will fail to find the cause of many allergic conditions. Many people are only slightly sensitive and the scratch method will not elicit any reaction in many who are clinically sensitive. The intracutaneous method is much more sensitive and should be used to supplement scratch testing unless adequate reactions are found on scratch testing alone. The intracutaneous method is dangerous unless done with weak dilutions or with extracts which have given no reaction to scratch testing. One who does intracutaneous testing with strong extracts and without preliminary scratch tests is courting disaster.

Patch tests are used in imitation of the incidence of contact dermatitis and should be used only for the detection of the cause of contact dermatitis.

Skin tests, no matter what method is used, are quite fallible. False positives may be obtained and false negatives are frequent. Tests done with food extracts are much less dependable than those with inhalants. The worker who depends wholly upon skin reactions to determine the cause of the patient's allergy will frequently have nothing to lean upon. In such circumstances careful and intelligent manipulation of the diet will often elicit the cause of the allergic symptoms. Without such investigation the results are, of necessity, frequently unsatisfactory.

The foregoing constitute a short list of facts which are generally agreed upon by workers in the field of allergy and which will be helpful, I believe, if kept in mind by those whose work is in other fields but who are confronted from time to time by the allergic person. Since allergic reactions may occur in any part of the body and may require differentiation from other conditions, no practitioner may be sure of escaping contact with them. Technical details of management may be left to the specialist but the few facts presented may be kept in mind by anyone and, I hope, found useful.

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ABSTRACT OF DISCUSSION

Dr. Homer E. Prince, Houston: During the past two or three decades the field of allergy has developed from a few theories and concepts until today it offers encouraging methods of approach to many baffling disorders. Thus, many cases of nasal difficulty, asthma, eczema, urticaria, gastro-intestinal upsets, and some types of headache are now regarded as manifestations of specific hypersensitization, and therefore are entitled to sufficient investigation along accepted lines of diagnostic study and therapy to establish or rule out the presence of allergy. In the rapid growth of this relatively new science we might all have been guilty of certain mistakes, not the least of which have been the result of overenthusiasm. Therefore, it seems quite proper that we have this common-sense paper by Dr. Black, whom we all know as a pioneer in allergy, and whose opinions we all respect because they represent the wisdom gained through many years of honest clinical practice and scientific research.

As mentioned by Dr. Black, skin tests must be selected to represent possible contacts in the environment of a particular patient. So far as inhalant factors are concerned, and to a lesser extent foods, a test series suitable for New England would be entirely inadequate in Texas. Tests with substances not commonly encountered in a particular area are unjustified, no matter what the importance of these antigens in other localities, and regardless of one's desire to impress his patient with an atmosphere of thoroughness.

Too much emphasis cannot be placed on proper interpretation of tests. No two skins seem to react alike. Again, it must be remembered that irritative reactions often result from strong concentration of any testing antigen. On the other hand, when properly diluted inhalant antigens give a high percentage of diagnostic reactions, and the importance of any test increases in direct ratio to the dilution with which it is obtained. But the importance of food tests is more difficult to evaluate; at best, positive reactions are only a guide to trial dietary restriction. Let me emphasize that positive skin reactions to foods should never constitute the basis for permanent removal from the diet; any food should be kept out of the diet only when its ingestion can be proved to cause unfavorable symptoms. We all see entirely too many patients with suspected food sensitization, who actually become malnourished after strict adherence to excessively restricted diets for long periods of time. Furthermore, in addition to nutritional requirements, the allergic disease itself often seems to respond better to therapy when the diet can be made more liberal.

Probably a great majority of allergy patients is treated by the general practitioner, the internist, or the pediatrician. This indicates a growing interest in allergy—an increased allergy consciousness—and enables many more patients to receive proper study and treatment than could possibly be cared for by the relatively few allergists, most of whom are located only in the larger cities. I would like to sound one word of caution in this connection: never follow printed, inflexible injection schedules without previously determining the tolerance of each patient, both as to dosage and interval between injections. The first precaution can be taken care of by testing with serial dilutions, the second by careful clinical observations; both are facilitated by experience.

Dr. Black mentioned that weather changes frequently act as trigger mechanisms to excite symptoms of allergy, especially in patients with asthma. I would like to add that temperature regulation in bedrooms will often be very helpful, especially during the damp, cold winter nights. Infection is another trigger, in my opinion probably the most im-

portant and difficult with which we are confronted in clinical practice. At times we can hardly escape the thought that infections, especially in the respiratory tract, are more than just triggers; they may appear to be the primary and sole cause of asthma. In either role they demand the most energetic and persisting efforts directed at their control. To seek a drier or higher climate, however, until all efforts at controlling the allergy along accepted lines have failed, or until it is seen that the entire process is a bronchitis that will not otherwise respond, is too often a desperate and to say the least very wishful undertaking. I can only say that I wish there was a utopia for all the allergic patients.

Dr. Charles B. Shuey, Dallas: Dr. Black's discussion emphasized some very important points and expresses years of knowledge and experience. I was happy to hear him take the stand he did on "outgrowing allergies."

Certainly too much faith is placed on skin tests and too many are being done unnecessarily. I have seen patients who proudly state that they went to a certain place and received 250 skin tests and that they were found to be allergic to twenty-five or thirty things without clinical trial of foods which showed positive reactions. The skin test is a clue, and a positive test means the skin is sensitive to a particular allergen; it does not imply clinical sensitivity. The clue must be followed and proven.

Dr. Ramsay Moore, Dallas: Dr. Black always gives an interesting and instructive paper. I am sure we all enjoyed it. The pediatrician comes in contact with allergy very early. Many allergic babies show symptoms during the first few weeks of life. Many of the colicky babies have definite allergic symptoms as they grow older, frequently passing through the cycle of eczema, allergic rhinitis, and asthma. The high percentage of allergic family histories that are obtainable in allergic children is remarkable; possibly 75 per cent of these allergic children have a family history of allergy; and where both parents are allergic the chance is that from 60 to 75 per cent of their children will have some form of allergy, while if only one parent is allergic, 35 to 50 per cent of their children will at some time show allergic manifestations. Eczema, allergic rhinitis and sinusitis, and asthma are some of the pediatrician's greatest worries, and while with the aid of the allergist, dermatologist, and otolaryngologist, we do get some excellent results, we still have much to learn before we can feel that we are successful in dealing with the allergic state as seen in children. I want to thank Dr. Black again for this very fine and practical paper.

HUMAN BITES AND TOOTH INJURIES

In many cases dental injury to the hands or fingers results from finger sucking and is to be distinguished from human bites, Francesco Donchese, M. D., Providence, R. I., points out in *The Journal of the American Medical Association* for April 21. He explains that hitting any part of one's body against somebody's teeth and sustaining an injury should not be called a bite. Also, injuries caused by pressure against the teeth while sucking are not true bites. These wounds are far from rare and unless they are properly determined as dental or tooth injuries their classification as warts, benign or malignant skin tumors, fungous growths or skin cancer may result in unnecessary removal of tissue, surgery or irradiation.

"Surprisingly enough," the author says, "they are often not diagnosed or they are diagnosed as a wart, a keloid, a sarcoid, a mycotic growth or an epithelioma and, accordingly, unnecessary biopsy, surgery or irradiation is done."

FEEDING TRENDS IN PEDIATRICS

P. E. LUECKE, M. D.
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Twenty-five years ago, going back only to the more recent past, the great concern of the pediatrician in regard to feeding infants and children was in trying to devise and prepare foods in such a way that the digestive capacities at the various ages would not be overtaxed; and in trying to prevent scurvy and rickets. Bovine tuberculosis was widespread among children. Milk born epidemics were frequent and diarrheas and dysenteries were a constant menace. Marasmus, coeliac disease, hemorrhage of the newborn and its resultant mental and physical crippling, chlorosis, spasmophilia, intestinal parasites, spasmodic croup, and tetany were frequent. These and other problems connected with feeding and sanitation challenged their best efforts, but were poorly understood.

The feeding armamentarium of the young pediatrician of that time consisted of the use of such things as Eiweissmilch, butterflour mixture, Eagle-brand milk, flour ball, barley flour, various gruels, long cooked refined cereals—such as farina and oatmeal, limewater, peptonized milk, and buttermilk. Cod-liver oil was given in small doses to small infants and in large doses to older ones and to children. Orange juice was begun about the second or third month. Cereals were added about the sixth month. Rusk, zwieback, and various crackers were given to help the infant cut his teeth. Puddings, bread, butter, jelly, cornbred, potatoes and gravy were next added. Strained vegetables were added about the ninth month and meats about the age of 14 to 15 months or later. Raw foods were added about the third year, though Brenneman, writing in Abt's System of Pediatrics in 1923, states that "ripe tomatoes can be allowed earlier than the others, and when stewed and finely divided can be given even in the second year." Of eggs, given during the first year, he writes:

"Eggs have enjoyed great popularity until recent times. So much has been said against them, however, in recent years that one would almost expect to find them classified among the dangerous articles of diet. It is rather difficult to explain or to understand or to share in this change of view. That they are a wholly unnecessary article of diet is certain. That they are demonstrably objectionable has never been shown."

The Vitamins A, B, C, and D were then known, but except for C and D were generally disregarded. The feeding intervals recommended at that time were usually three hours the first three months, four hours the next three months, five feedings daily up to

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10 or 12 months, four feedings up to 15 or 18 months and three feedings thereafter. After the third year the child ordinarily was fed from the adult's table, with selections largely from the more digestible starches, puddings, soups, and so forth. It is from the children fed under this plan that our present high percentage of dental cripples and rejectees come.

During the 1920's the actual feeding regimen as outlined, changed but little, though certification of raw milk, pasteurization of milk, tuberculin testing of dairy cows, increasing inspection of meats and other foods, and home refrigeration lowered the mortality and morbidity rates considerably and gave the pediatrician these extra tools in his efforts to improve the health of his patients. During this time too, advances in the study of the vitamins and minerals essential to proper nutrition advanced rapidly, and the work of such men as McCollum, Sherman, Weston, and others began to direct the attention to a more critical study of the American diet, with particular emphasis on the so-called accessory food factors, such as minerals and vitamins contained not only in various classes of foods, but also in the same food produced in different soils and in different climates. These investigations soon showed that most of the patented foods, the refined cereals, and breads which we were making the mainstay of an infant's diet up to the ninth month or longer, were woefully lacking in everything but calories.

The diffusion of this knowledge among the profession probably marks the beginning of the present era of feeding practices. Another factor of almost equal importance was the work done during this time, by Marriott and his associates at Washington University in St. Louis, when he demonstrated by his lactic acid-milk-karo formulae that most infants could digest straight cow's milk with the added acid and karo, and that the many and complex milk dilutions, additions and preparations were not usually necessary. Brennemann of Chicago followed shortly afterward with the information that even the newborn infant could usually digest evaporated milks, such as Carnation, Pet, and others, with the addition of enough water to make it approximately the same composition as whole cow's milk and without the addition of any acidifying agent. About this time, also, studies made at the University of Toronto showed that infants fed on cereal enriched with Vitamin B, in the form of yeast and with iron, showed increased rate of growth and tone over those fed on the regular cereals.

These advances in our knowledge, namely —that the infant's digestive ability was greater than we had realized and that vitamins and iron added to the cereal improved their nutrition, pioneered the way to our present concept of nutrition and feeding—that the infant can take and assimilate concentrations and varieties of foods formerly given only by the foolhardy, provided due care is taken in their preparation and preservation; and that carbohydrate foods, particularly the starches and sweets, though forming the mainstay of the diet twenty years ago, should assume a secondary role. Emphasis is now placed on vegetables, fruits, eggs and, later, meats, and on fortified cereals and breads when the infant is given semisolid foods. Jeans, writing in the Hand Book of Nutrition of the American Medical Association, mentions the importance of,

> "Supplementing the milk diet of the infant with foods containing iron and thiamine and possibly other members of the Vitamin B complex. Whole grain cereals and especially fortified proprietary cereal foods contribute importantly to the satisfaction of these needs. It is, however, the custom of a few physicians to defer the feeding of cereals until the second half of the first year and to supply the needed iron and B Vitamins from egg yolk, vegetables and fruits. When these foods are given in appropriate quantities, the supply of iron and B Vitamins is somewhat greater than from the whole grain cereals, though not greater than from some of the fortified proprietary foods. Thus among the natural foods the known needs of the infant are supplied better from egg yolk, vegetables and fruits than from whole grain cereals. When these foods are given, the feeding of cereal loses much of its importance and may be deferred until the capacity of the infant increases to the extent that the entire group of foods may be taken comfortably."

From the above and other sources it would appear that the feeding to infants of refined cereals, such as farina and so forth, especially with added calories in the form of sugar for sweetening may contribute definitely toward depriving the infant of items necessary to his well being. Add to this the too common practice of permitting the mother to give crackers, zweibach, cakes, cookies or graham crackers between bottles and the basis for dietary deficiency is at once established. With our present knowledge and the help of commercially prepared fortified cereal foods, canned sieved vegetables, fruits, soups and meats which make it easy for the mother to carry out instructions, such a condition should be readily avoided and the feeding of infants put on a firm and proper basis with good results.

Not so much progress seems to have been made in the application of these principles to the preschool and older child. After the dreaded "second summer" is passed and the youngster has all his teeth, and mother has to prepare his food, instead of serving him

the "baby" or "Junior foods" interest in his diet begins to lag, and, according to the well-worn phrase, "he eats everything." Too often, the physician answers the query as to what to feed him in generalities, such as "most anything except rich or greasy foods." The uncertain mother and the demanding child then direct his feeding habits, which soon begins to show their effects.

About the fourth or fifth year of life, if his diet be improperly constituted, dental caries may begin to show itself. The exact cause and prevention of this condition is still a matter of controversy. During the past years caries was just about to be prevented by the abundant administration of cod-liver oil; then by added amounts of calcium; then by these two and more orange juice, and so forth. Then came the thought that sweets caused an increase in the number of acid producing bacteria in the mouth and alkaline tooth powders and pastes and the tooth brush assumer greater prominence. Then, after the teeth continued to decay in spite of all these combined measures the starches were also incriminated, especially the refined "adhesive" types, as cereals, rice, grits, waffles, hot cakes, puddings, pastry, and the like, together with honey and the various syrups. At present, aside from the research being done on the effect of flourine in hardening the enamel, the concensus of opinion seems to be that we get out of the teeth what we put into them, that if sufficient milk, meats, eggs, fruits and vegetables are included in the diet to form proper tooth structure, dental caries will be reduced to a minimum.

It is the essayist's opinion from his own experience and from information gathered from various sources, that not only sounder teeth, but a generally stronger physique will follow the marked limitation of all the common starches and sweets in the diet of youngsters of any age. The elements necessary to the building of the body are found principally in vegetables, fruits, meats, eggs and milk. Fatigue postures, so-called nervousness, constipation and lack of appetite are much less common, and tetany and convulsions, the bane of any practitioner's life and quite common in years past, also seem to have largely subsided on a diet consisting of these foods. The radio would have us believe that our energy comes from bread, cereals, candies and cold drinks, and of course, they do produce energy for the body. But foods may be likened to fuel for an old kitchen range. These carbohydrates are like small wood. They make a quick hot fire, but they soon burn out, and youngsters who eat largely of them also flash hot and cold temperamentally and otherwise. Their energy is not sustaining. They seem to lack stamina. The milk, meats, eggs, fruits and vegetables, on the other hand, are the larger pieces of wood. They are the slow, even burning, long lasting, backbone of the fire. That's the kind of wood it takes to properly cook up a good Sunday dinner, and these foods are what it takes to make an even tempered, smoothly functioning mind and body.

The feeding interval, the time between feedings, has tended to increase in later years. Since Marriott, Brennemann, Stewart and others have shown that the digestive capacity of the average infant is greater than was formerly thought, the tendency towards giving more concentrated foods has increased. It was formerly taught that equal parts of whole milk and water was strong enough for most babies for the first few weeks of life. Now it is not uncommon to give almost equal parts of evaporated milk and water from the second week of life. These concentrated formulas satisfy the appetite of the infant for a longer period of time and only water has to be given between times. Also with the daily addition of solids to the diet this tendency is further enhanced. Many infants are given only four feedings each twenty-four hours as early as the seventh or eighth month, and almost all of them by the ninth or tenth month, and on only three meals per day by the end of the first year. Where this is done and milk, crackers, zweibach, cookies and other starches and all sweets are withheld between feedings, loss of appetite is a rarity, and it is much easier to get the infant or child to take and enjoy the foods that are best for him.

During the past few years much reliance is being placed on the various synthetic and refined extracts of vitamins. The more informed investigators, however, caution against this. The science of nutrition is still in its infancy. Almost all of the vitamins which twenty years ago were thought to be distinct entities are found to be multiple, as, for instance, the various B-Vitamins now isolated; also ascorbic acid, which for a time was thought to be the Vitamin C, comparable to that of orange juice. It has been shown that not all cases of scurvy could be cured by ascorbic acid alone. More recently citrin or Vitamin P, has been found closely associated with it. This vitamin, so called because of its effect on the permeability of the finer blood vessels, is shown to reduce capillary permeability and to shorten coagulation time. It apparently has considerable effect on the healing of ulcerative colitis and gingivitis and reduces the symptoms in some of the purpura. Up to the present time, it would appear wise, therefore, to devote more atten-

tion to the proper natural components of the diet, instead of the synthetics, in order to be certain that no essential element is neglected.

In the light of present day knowledge, an approximately average feeding schedule would be as follows:

1. Breast feeding, when possible, at four-hour intervals from birth, with the addition of orange or tomato juice and Vitamin D supplement, as soon as breast feeding has been properly established, usually at about three weeks. If breast milk is not available in sufficient amounts, then a properly concentrated formula should be given in sufficient amounts to maintain this schedule. Also during the first three months of life, or until other sources are available, the addition of small amounts of B Complex vitamin to furnish any amount not derived from the formula would seem advisable.

At 3 months the addition of fortified cereal foods, egg yolk, strained vegetables and fruits are started in successive steps, and in amounts tolerated by the individual.

3. At 5 months to 6 months the addition of raw food in the form of selected bananas, scraped apple, fresh tomato (seeds and pulp), and finely grated raw cabbage or carrots, and so forth, is made.

4. At 8 to 10 months weaning from the breast and the giving of straight unboiled pasteurized or certified milk; the changing of the feeding interval to three meals daily with the possible addition of a fourth serving of milk if enough is not taken otherwise; and the addition of properly cooked meats scraped, ground, chopped or grated is carried out.

5. After the twelfth month careful introduction of limited amounts of whole grain or fortified bread, potato, custards and simple desserts is permitted, if the child is eating well of the basic foods mentioned above.

6. During the second and subsequent years emphasis to the mother should be made of the rule that only fruit juices and water should be given between meals unless the child's appetite is such that three substantial meals do not suffice. As soon as between-meal feeding begins to interfere with a good appetite at meal time it should be immediately stopped.

7. Vitamin D supplements should be continued throughout the growing period of life, and citrus fruits, tomatoes, or their properly prepared juices, should be included in the day's menu.

It is usually necessary to caution the parents at about the fifth and ninth months against the tendency of all adult associates of the family to give the infant crackers, cookies, zweibach, candies and cold drinks between meals. When such piecing is practiced it will quickly lead to a demoralization of the proper diet habits of that infant. Also, at the first birthday it is the essayist's practice to explain to the parents that for practical purposes all food may be divided into two classes: body building and sustaining foods, and so-called energy foods. The body building foods are comprised of vegetables, fruits, meats, eggs and milk. All other foods are in the energy group. The parents are advised that if they desire to build their child into a sturdy, healthy, happy individual, they must, of necessity, give the body builders and limit all the other foods throughout the growing years. To them, the energy foods are likened to gasoline for the car. Gasoline can make it run and keep it warm, but a car cannot be built from gasoline, nor can the free exhibition of gasoline without proper attention to the upbuilding or repair of the car long endure without mishaps. Emphasized at this age, it forearms them against the inevitable pressure that the ensuing years bring from the child and others to abandon such a course. They are warned that they will get out of their child exactly what they put into him.

SUMMARY

1. In the past one or two decades the trend of infant and child feeding has been away from the complexities of percentage and calorie feeding, the multiplicity of complex formulas and the use of starches and sweets, and toward furnishing these youngsters with foods which more nearly give them the essential minerals, proteins, fats and vitamins, which are suitable and needed for their proper body building and functioning.

2. Barring chronic disease and organic malformations most cases of anorexia, constipation, anemia, "nervousness," marked dental caries, postural deformities, and so forth, common in so many youngsters, may be prevented or markedly benefited by limiting the diet largely to the essential foods, keeping the feeding interval sufficiently long, and preventing the ingestion of milk, starches, and sweets between meals.

3. Too much reliance on the synthetic or refined extractives of vitamins to supplant those from the various foods themselves, looms as probably inadvisable.

4. Proper presentation of this matter to parents and children, and their trial of this regimen, usually brings convincing and satisfying results to parent, child and physician.

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ABSTRACT OF DISCUSSION

Dr. C. O. Terrell, Fort Worth: Dr. Luecke has so thoroughly covered the progress in feeding that little remains to be said.

Marriott in the early twenties laid down the qualities of a desirable diet and time has not changed this dictum. Foods should be well balanced for protein, carbohydrates and fats, contain sufficient minerals and vitamins, and be free from harmful bacteria. In addition they should contain sufficient calories and be palatable.

Most of our improvements have been made by some bold unorthodox individuals who dared to introduce heretofore forbidden foods to young infants. I can well remember an older doctor in the small community in which I began to practice, who in 1911 began to treat diarrheas with ripe bananas. I had been taught that they were good only for monkeys and considered the doctor a heretic.

Our improved knowledge in biochemistry, physiology, and vitamins has led to a more exact knowledge of food requirements. We may look for a greater progress in the future than has been exhibited in the past.

The deficiency diseases, dental caries, and possibly a great number of conditions not now understood will be past history.

Dr. W. D. Brown, Beaumont: Dr. Luecke has presented a subject which is always timely and just now appropriate if for no other reason than to combat the misleading propaganda urging dextrose and other carbohydrates as "energy" foods.

The subject should be discussed more often despite the present day trend in this specialty to consider it rather prosaic. From the time of Abraham Jacobi up to two decades ago, the feeding of infants and children was one of the main subjects of scientific papers. If our interest as pediatricians has now moved on to other fields of research, we must never forget that nutrition is the chief apology for our existence as a specialty and, therefore, must be presented again and again not only for our own advancement but as a means of teaching.

Dr. J. R. Lemmon, Amarillo: With reference to the effect of diet on the teeth of children, I wish to call attention to the fact that the higher fluorine content of the potable water in certain areas, notably that of the Panhandle-Plains of Texas, tends to make the teeth more resistant to decay. The permanent teeth may be mottled, and the condition is known as chronic endemic fluorosis, or mottled enamel of teeth.

ANTIVIVISECTION OBSTRUCTS SCIENCE

The unsound sentimentalism created by the decision of the parents of a 21-month-old daughter, killed by the family's bull terrier, to have the animal killed "serves to reemphasize the difficulties faced by physicians and scientists in attempting to carry out their service to mankind by experiments on animals," *The Journal of the American Medical Association* for March 10 declares.

The total lack of consideration and the crass indifference toward the grief and bereavement of the parents that was shown by the busybodies who deluged the parents with protests when it was decided to have the dog killed, *The Journal* says, "is almost unbelievable; yet these are the stuff of which antivivisectionists is made. To them the life of a dog is more important than the life of a child. Their warped mentalities conceive that this dog should be saved and pampered, perhaps to kill another child, certainly to be a constant care, expense and potential menace. The same muddled thinking would deny the use of animals to scientists in the laboratory, preferring that rats, mice, guinea pigs and frogs should live even if the lives of human beings must be lost in consequence . . ."

THE USE OF BARBITURATES IN OBSTETRICS

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Barbiturates have not only been accepted as a basic anesthetic, an essential drug in mixed anesthesia, but for almost two decades have been used as an analgesic in obstetrics. The technique of usage has improved markedly with the progress of medical practice but even at the present there is violent dissension in the ranks of the obstetricians by certain groups and many individuals as to the advisability of use of the drug, the contention being that harmful effect upon the baby is most frequent, due to filtration through the placenta and a consequent variable period of resuscitation. This period varies with the amount and type of the barbiturate, when given during labor, susceptibility of the mother, and whether given orally, rectally, or intravenously. Naturally, the terminal anesthetic, which is either obstetrical or surgical, and the type used, are factors to be considered if the newly born has to be resuscitated or if it is sleepy, listless, and does not nurse for a period of from hours to days.

There is little use to detail the transition from simple phenobarbital sodium orally, with additional intravenous administration of 15 Gr. of sodium amytal when the patient complained too loudly during the first stage of labor, or the rectal use of "Barbethol," a modified Gwathmey technique, to the more acceptable "Pentosco" method of Irving, Smith and others of the Boston Lying-In Hospital. All of these methods had to be supplemented by a terminal anesthetic, and had many disadvantages to the mother, such as:

1. A noisy, restless patient who required a crib, restraining sheet, and/or constant observation to prevent self injury during and after labor.
2. Dehydration, increase in temperature, and visual disturbances for a period of from hours to days.
3. Frequent catheterizations and consequent urinary tract infection.
4. The likelihood of infection of the reproductive tract caused by contamination from feces or soiled linens and perineal pads.

The disadvantages observed so far as the baby is concerned, are, briefly, failure to establish respiration quickly with consequent cyanosis and potential damage to the very sensitive brain cells from anoxemia, and a prolonged period of drowsiness during which period there is progressive weight loss due

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to dehydration and inanition. This is especially true of the premature baby where deglutition is not easy at best. One has to refrain from large amounts of hypnotics, narcotics, or any analgesic or anesthetic agent by inhalation in cases of prematurity of labor for fear of embarrassment of the usually very small infant.

However many disadvantages the barbiturates have, the patients have relief from pain of childbirth, due to the stretching or tearing of tissues. This is not only demanded by the parturient, but such the attendant is usually most anxious to provide. Women of today generally are less competent to have children than they were many centuries ago when they worked alongside the husband performing the most difficult tasks, dropping out only long enough to give birth to their young and then resuming the task at hand with little loss of time. Nevertheless, the obstetrician knows from the earliest accounts, labor was attended by pain, and efforts to relieve this distress varied from a stunning blow on the head, drunken stupor from wine, vapors of steeping drugs, or herbs to the tireless efforts and incantations of the village sorcerer or the tribal "medicine man."

After years of usage of analgesia in obstetrics during which every effort has been made to fit the method to the patient instead of the patient to an established procedure, some generalizations may be made concerning barbiturates which seem to be by far the most widely used and acceptable of the methods of analgesia until recently. There is an increased demand for relief from pain and popularization, often inadvised, is due to the lay press. Improved teaching facilities in medical schools, clinics, hospitals, and scientific publications, have made many methods of pain-relief available to physicians.

The type of barbiturates may be any one of the many developed by the various drug manufacturers. Some prefer the long acting but slow-to-take-effect sodium amytal or nembutal, plus seconal which is reputed to be rapid in action but short of duration, with a complemental intravenous administration of 7½ to 15 grains of sodium amytal, or 3¾ grains of nembutal for the first stage and a terminal anesthetic of ethylene and oxygen, possibly with ether added in the event of an operative procedure, such as an episiotomy, application of forceps, or version with extraction.

There is thought by some individuals, groups, and drug manufacturers to be a less exciting action resulting from the barbiturates which have a calcium, rather than those with the sodium radical. It is the belief of the writer that this is true. It is also thought by many, that a very large initial dose by mouth gets the patient past the excitement stage with less degree of excitement, and more quickly. This progress, however, is directly proportionate to the speed and completeness of absorption from the gastrointestinal tract. So when the patient experiences any of the premonitory symptoms of the onset of labor, she is asked to refrain from eating residue-producing foods.

If it is determined definitely that the patient is in labor and if the following conditions are present (1) contractions occurring from three to five minutes, accompanied by pain; (2) duration of contractions from 40 to 60 seconds; (3) effacement of the cervix preferably, and (4) 3 to 5 cm. dilation of the os cervix, after preparation and a cleansing enema, she is given 6 grains of nembutal "C" by mouth. If she does not obtain some relief from pains, or does not rest between contractions in from 30 to 60 minutes, she is given 3 grains more by mouth, and this may be repeated until she has had from 12 to 15 grains over a period of several hours. If the labor is progressing too rapidly, she may be given 3¾ grains of nembutal intravenously. The latter has been repeated several times with no apparent harm to mother or child. Due to the relaxing influence of the intravenous nembutal on the smooth fibers of the circular muscle of the cervix, care must be exercised that the patient does not precipitate or deliver too rapidly. The action of the intravenous nembutal is rather fleeting due to its rapid elimination through the kidneys, but it is better not to give any medication closer than one or two hours before delivery. A terminal anesthetic of ethylene and oxygen is used which may be supplemented by ether if operative procedures are employed. One cubic centimeter of ergotrate or ergonovine may be given intravenously as the shoulder sweeps under the pubis, or 1 cc. of pituitary extract intramuscularly.

Occasionally the labor in primiparas and much more frequently in multiparas is progressing very rapidly. It is then the practice of many, under these conditions, to give from 6 to 9 grains of the barbiturate by mouth and soon thereafter to administer 3¾ grains of nembutal or 15 grains of sodium amytal intravenously for the first stage of labor and a terminal anesthetic for the second stage. The third stage is conducted as was indicated previously.

There is usually a minimum loss of blood when this method is employed. If labor has been long, it is advisable before or especially after labor has been terminated, to give at least 1,000 cc. of 5 per cent glucose in saline intravenously.

The use of scopolamine has been abandoned by many, the reason being the belief that the synergestic action with barbiturates is largely outweighed by the excitation it produces in the patient, and that there is stimulation in the frequency of intrauterine respirations of the fetus. The use of episiotomy and elective forceps is naturally increased and advisable. Maternal mortality and morbidity have not been increased. The mortality rate as indicated by a recent review is between 1.5 and 1.6 per cent in full term babies. The premature infant mortality has not been reviewed but as with all anesthetics, is apparently increased. It has been a general observation that when labor is well established, reports to the contrary notwithstanding, the period of the first stage is appreciably shortened rather than increased.

The short acting barbiturates, especially pentothal sodium, have been used successfully in mixed anesthesia, and as a total anesthetic agent, especially in operative obstetrics, such as cesarean section, the patient being prepared and draped before the intravenous administration of a 2.5 per cent or 5 per cent strength is begun. When the patient is soundly asleep, usually by the time she has counted ten, the incision can be made, and ¼ gr. morphine is given intramuscularly after the baby is delivered. The closure is done with the use of ethylene and oxygen. Ether may be added if necessary for relaxation.

Many preparations are being used, but, without question, it is most advisable for the operator to employ the method most effective in his or her hands with the ultimate aim of giving the maximum relief from the pain of childbirth with the minimum danger or embarrassment to the mother and child.

Any present day discussion would not be complete without mention of the use of demerol as developed by Schumann and others at the Boston Lying-In Hospital. A brief resume of its usage which has been very fully described in the January, 1944, number of the *American Journal of Obstetrics and Gynecology* follows:

As soon as it develops that the patient is in labor and has 3 to 4 cm. cervical dilation and complains of pain, and if she has had proper preparation and an enema, she is given 100 mg. of demerol with 1/100 grain of scopolamine intramuscularly. The initial dose is determined by the attending physician based upon the presumption that she is to have a reasonably long labor. Within two to four hours afterwards, she may be given 1/200 grain scopolamine intramuscularly and four hours later may be given 100 mg. demerol plus 1/200 grain scopolamine. This may be repeated until the patient has had 400 to 500 mg. of demerol if necessary to control her distress. The terminal anesthetic, of course, is preferably ethylene and oxygen, but other terminal anesthetics may be substituted.

If it is determined that the patient is progressing very rapidly 100 mg. of demerol plus 1/100 grain of scopolamine may be given intravenously, and if this does not control the pains of her contractions, she may be given 50 mg. of demerol with 1/200 grain of scopolamine intravenously plus 50 mg. of demerol and 1/200 grain of scopolamine intramuscularly. This should relieve her until the cervix is completely dilated and ready for delivery at which time a terminal anesthetic of nitrous oxide or ethylene and oxygen or ether may be given.

In cesarean sections demerol is an ideal preparation, apparently because it does not depress the respiration of the mother or the fetus and, therefore, may be used as follows: One hour before the operation 100 mg. of demerol plus 1/200 grain of scopolamine may be given intravenously and then a terminal anesthetic of gas and oxygen may be used. It has been my observation that there is very little effect upon the mother and baby. The baby cries immediately upon delivery either from vaginal delivery or cesarean section, which is the ultimate aim of any analgesic agent; therefore, this procedure is presented for study and usage upon familiarization with the indications, contra-indications and complications.

As regards the usage of barbiturates in gynecology, apparently there is no drug which has appeared in the literature which has so adequately fulfilled the requirements of a pre-anesthetic medication as has the barbiturate. It may be used as a pre-anesthetic drug, combined anesthesia, and anesthesia.

1. *Pre-anesthetic Use:* It is quite a common usage in the field of surgery, and especially gynecological surgery, to give an adequate amount of barbiturate the evening before surgery is performed, which may be from 1½ to 3 grains of amytal, seconal, nembutal, or any of the other phenobarbital preparations. Two hours before the operation the following morning, 1½ grains of barbiturate is given by mouth and then the narcotic, which is usually ¼ gr. morphine plus 1/150 gr. atropine or hyocine, is given. It is common practice, however, by many operators to use 3¾ grains of intravenous preparation of barbiturate, such as nembutal, immediately preceding the operative procedure, the terminal anesthetic being the gas and oxygen, preferably ethylene and oxygen. A discussion of the effects upon the patient and

indications or contra-indications will not be entered into here. Each operator has his own procedure and should not be governed by whatever appears in literature or discussion but should use whatever procedure is most easily employed by him.

2. Avertin is a very highly publicized drug and a barbiturate administered rectally, the maximum dosage being usually 60 to 90 mg. per 10 Kg. of body weight. This ratio, however, is determined by the patient and his or her condition. Morphine, ¼ gr., is usually given one hour before the administration of avertin and a terminal anesthesia of gas and oxygen or ether is employed, gas and oxygen being necessary. The only disadvantages of this procedure are a prolonged anesthetic action, a marked effect upon the respiratory function of the patient, failure of bladder evacuation, and the necessity of having the patient closely guarded in the postoperative state.

3. In addition to the oral and rectal administration of barbiturate one must certainly consider their intravenous use. This type of administration naturally divides itself into those of long action such as numal, a German preparation, and pentothal sodium, an American preparation. The barbiturate of short duration with which we are thoroughly acquainted and the most popular is evipal.

There is very little virtue in extended discussion of the use of these drugs for analgesia or anesthesia. Unquestionably there are few operators who have not used pentothal sodium, either the "one shot" method or continuous pentothal sodium plus a terminal anesthetic of gas and oxygen or ether, gas and oxygen, which procedure is better known as "combined anesthesia." This is admirably suited to cesarean sections. Briefly, the process is administration of a 2.5 per cent or 5 per cent pentothal sodium until the patient is asleep; the abdominal incision is made; uterine incision is made as far as possible with the effect of the pentothal sodium, and then the terminal anesthetic is administered until the baby is delivered and closure is effected. There are operators, however, who push the pentothal sodium as an anesthetic agent and are thus able to continue the operative procedure without the use of a terminal anesthetic.

Of the short acting barbiturates, unquestionably evipal is the most popular. This is very easily used in office practice for incision of bartholin glands, for simple dilatations of the cervix for diagnostic purposes, and it may be said that it is used for commercial procedures in gynecological practice, such as illegal interruptions of pregnancy. The patients, however, recover very rapidly after its administration and this is a factor which makes it popular and very usable for office and hospital practice.

In conclusion, it may be said that there is no group of drug preparations which have become so generally popular and so easily usable as have the barbiturates in their oral, rectal, intramuscular, and intravenous administration in analgesia and anesthesia, but a warning note should be sounded that each individual is more or less susceptible, and some sensitive to these preparations in any form. As has been stated before, the anesthetic must be fitted to the patient and not the patient to the anesthetic.

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INTRA-OCULAR MELANOMA

CASE REPORTS

BY
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In 1935 the American Registry of Ophthalmic Pathology maintained at the Army Medical Museum under the auspices of the American Academy of Ophthalmology and Otolaryngology had 273 cases. By 1938 the number had increased to 1,238 through the cooperation of numbers of ophthalmologists and pathologists. By 1941 the number had reached 1,600.[4] When one considers that many other cases are probably not reported to this Registry, it becomes evident that the condition is by no means as infrequent as might seem apparent in the experience of any one individual ophthalmologist.

It is my purpose to incorporate in this paper some pertinent observations gleaned from recent literature, and to present two cases in some detail.

In the 1,600 cases above mentioned, there were 799 men, 751 women, and 50 sex unknown. Only 8 were Negroes, which is an incidence of 0.5 per cent.

Gifner is given by Ostrom[7] as authority for the statement that the incidence of intra-ocular melanomata is but 1 in 25,000 primary eye cases. The age bracket of patients suffering from typical malignant melanoma of the choroid extends from 11 years to 91 years of age.[4]

The condition may be recognized in many instances by intra-ocular examination. In many other instances the condition is not recognized prior to enucleation of an eye, removed, for instance, because of the intolerable pain of congestive glaucoma or plastic iridocyclitis. Benedict[3] tells of 108 melano-

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epitheliomas of the uveal tract in which 20, or 18.5 per cent, were enucleated for relief of congestive glaucoma without the diagnosis of intra-ocular tumor having been made. The presence of a tumor may have been suspected in some instances, but verification was possible only by section of the globe.

Wilder[4] describes a silver staining method for reticulum fibers; and on the basis of this method Callender, Wilder and Ash[4] have presented interesting tables to show a low mortality rate in heavily fibered tumors, and a low mortality rate in lightly pigmented tumors. Benedict[3] expresses the opposite view, namely, that greater pigmentation means lesser malignancy.

Melanin is thought by some to be of hematogenous origin; but Dawson[5] says that "Melanin pigmented tumors are regarded as having their origin in epidermal or neuro-epithelial cells, and melanin pigment formation in the body is regarded therefore as exclusively an ectodermal function." The presence of melanin in a tissue does not necessarily mean that the tissue is malignant. It follows that melanoma may be classified as benign and malignant. Certain flat slate-colored patches are sometimes referred to as benign melanomas, and may be found in the skin, iris, and choroid. Malignant melanoma is a term used to define that type of tumor which is prone to metastasize and produce a fatal outcome. The terms melanosarcoma, melanocarcinoma, melano-epithelioma, and malignant melanoma have all occurred in the literature and all refer to the same type of tumor. Externally one may encounter melanomas of the lids, conjunctiva, caruncle, and limbus. Internally there are melanomas of the iris, ciliary body, and choroid. Because of the transparency of the cornea, those occurring on the surface of the iris are accessible to microscopic study with the biomicroscope or slit lamp.

Callender and associates have typed these tumors as spindle cell (divided into sub-types A and B), fascicular, necrotic, mixed, and epithelioid. Sometimes cells remote from blood vessels die for lack of oxygen and the tissue becomes necrotic, in which event it is difficult to classify. The spindle A type is rated as least malignant, and the others of ascending malignancy in the order given. Further commenting on malignancy, they show that in a group of 500 who lived more than 5 years, 48 per cent died from metastasis; hence they concluded that patients who live five years or longer after enucleation are not out of danger, because some deaths have been recorded from metastatic melanoma as late as eighteen years after enucleation.[7]

Reese[8] found that an eye with malignant melanoma sometimes presented accumulations of pigment cells on the anterior surface of its iris, whereas the fellow eye would show no such anomaly; hence when such pigmented areas or "freckles" on an iris are recognized, one should suspect malignant melanoma. This parallels a case report by Ostrom.[7] A 54-year-old white woman came to him with a painful blind eye in which the tension was 90. After controlling the tension somewhat by miotics an iridectomy was successfully accomplished, but the eye remained blind. Forty months later the eye was examined again as a matter of interest to patient and physician. A condition was found similar to that described by Friedenwald, the iris being entirely covered by "wart-like growths on the iris which resemble a field of stubble or a deforested landscape where only stumps of trees remain." Reese further stresses the point that a long retro-orbital section of the nerve need not be removed, because this tumor does not spread into the nerve, but by way of the emissariae; and remarks that recurrences in the orbit are unusual, even though there may have been an extra-ocular extension.

Reese mentions the necessity for making a differential diagnosis; for instance, detachment of the retina due either to hemorrhage or to subretinal carcinomatous metastasis from a primary tumor elsewhere. Moreover, one must also be able to recognize a detachment of the choroid due to injury, or one incident to operations for cataract or glaucoma. He cites one case where immediately followlowing a Lagrange operation for acute glaucoma the surgeon thought he saw a malignant melanoma and therefore performed an enucleation, but biopsy showed this to be a detachment of the choroid.

Rones[9] stresses the difficulty, but likewise the necessity of early recognition of these tumors. He relates a case where a delay of fourteen months occurred between the patient's first complaint and the enucleation of his melanotic eye. This was partly due to the failure of his first attendant to recognize the possibility of a tumor, and secondarily to a conflict of opinion between consultants. When the eye was finally enucleated and diagnosed as having malignant melanoma, metastasis had already occurred, from which he died four months later. This same author mentions the 44.6 per cent of a series reported by Terry and Johns where the presence of a tumor was not even suspected clinically. The enucleation of a blind, painful eye is imperative because of this possibility. One must also remember that there is a remote possibility of such a tumor causing sympathetic ophthalmitis. He quotes the article of Sam-

uels[10] on necrosis occurring in these growths, who found among 84 cases one indisputable case of sympathetic ophthalmitis.

Asbury and Vail[2] report the case of a 26-year-old man, first seen in 1933, whose complaint was dimness of vision. They noticed an edema of the macula and an oval yellow spot below the macula, which was thought to be a beginning choroiditis. There was a relative central scotoma. After three or four months they found a slate-colored raised area which was considered to be a congenital nevus. By the fall of 1936 this had become elevated 3 diopters and was four or five times the size of the disc. Retrobulbar transillumination and consultation resulted in agreement that enucleation was indicated. In the meantime the patient had several convulsive attacks, which were thought possibly due to cerebral metastasis. When the eye was enucleated the pathological diagnosis was malignant melanoma. Incidentally autopsy seven and one-half years later demonstrated that the intracranial lesion was a glioblastoma multiforme of the right cerebral hemisphere and not a metastasis from the intra-ocular tumor.

Albers[1] also believes that benign melanomas of the choroid can undergo malignant transformation, and cites a case in support of his theory.

Case 1. A white man, aged 59, presented himself on November 17, 1934, stating that seven months before then he had noticed that the right eye was blind. It had begun to ache two days before he came in.

Examination. The left eye had 20/30 vision with no remarkable findings. Tension was 25 mm. Hg. with a Schiotz tonometer. The visual field was approximately normal. The right eye had doubtful light perception. The diagnosis was absolute glaucoma with acute exacerbation or flare-up. The tension registered 60 mm. Hg.

The following day the tension was 71 mm. Hg. After an adrenalin pack it was reduced to 65 mm. A paracentesis of the anterior chamber was performed at 3 on the clock dial. Two days later the anterior chamber was very shallow; the pupil was still dilated, and the eye was very hard to fingers; the lens was cloudy, and no view of the fundus was possible. A retrobulbar injection of novocaine and adrenalin made the eye much softer; then an iridectomy was performed with only very little bleeding from the iris. During the next few days tension gradually dropped as low as 40; and then twelve days after iridectomy it shot up again to 65 with intolerable pain and the eye was therefore enucleated. The eye was fixed and bisected, and findings by Dr. May Owen, the pathologist, were as follows:

The specimen submitted is one-half of an eyeball that measures 3.5 by 3.5 by 1.2 cm. The lens is opaque. Extending from one side of the optic nerve forward there is an oval firm grey tumor. One-half of the tumor measures 1.7 by 1 cm. Small brown pigment areas are scattered through the grey tumor. The retina is detached over the greater part of the surface and displaced into the vitreous. Microsections from the tumor are composed chiefly of closely packed varying sized cells, the majority of which have slightly elongated, hyperchromatic nuclei and many mitoses. A large number of the tumor cells contain granular brown pigment. The more superficial layers of tumor cells are arranged in wide bands perpendicular to narrow strands of fibrous tissue that is diffusely infiltrated with lymphocytes. In the less compact portions some of the tumor cells have a concentric arrangement around the blood vessels. There are multiple blood vessels, many of which are filled with red blood cells. The optic nerve is small, distorted and is irregularly infiltrated with inflammatory cells. There are small deposits of lime salts in the optic nerve at its entrance into the eye. The pathological opinion is melanocarcinoma.

Case 2. S. H. B., a white man, aged 61, a very intelligent executive, consulted me December 7, 1943, because of failing vision in the right eye. Three or four weeks before he had gone to an optometrist because he noticed he could not see so well with the right eye and thought he needed a change of glasses, which is exactly what he got. Nothing was said to him about the cause of his defective vision. The vision continued to decline and, after the above mentioned interval, he decided to consult an oculist. He stated that he had taken a severe cold, and that for the last three weeks, if he wanted to see straight ahead with the right eye, he had to throw his head far backward.

Examination revealed the left eye to be normal in all respects with 20/20 vision. With a sphere plus 2.50 he had satisfactory reading vision.

Vision of the right eye was 3/50. I found a normal condition of the lids, conjunctiva, sclera, cornea, anterior chamber, iris, pupil, and lens. The patient laughingly called attention to the fact that this eye had always had different coloring from its fellow. The tension measured 15 mm. of mercury on the Schiotz tonometer. The upper field was gone to a considerable level below the line of horizontal fixation. Ophthalmoscopy was impossible through the undilated pupil, and with a dilated pupil was most unsatisfactory. A narrow red fundus reflex was obtained from the upper quadrant in which some fundus details appeared normal. Immediately behind the lens there could be recognized an indefinite grayish-brown mass which was studied by every means at our disposal. My first impression was melanosarcoma of the choroid. I thought transillumination would be helpful, but it was an abject failure. No matter where the transilluminator was placed there was no light reflex through the pupil. With a very strong lens in the ophthalmoscope one could get the impression that the surface of the mass was vascularized, but vessels were not filled with blood. With a very strong beam of light and the binocular loupe this impression was strengthened, and the slit lamp enhanced the conviction that a subretinal mass was filling most of the vitreous chamber.

I advised the patient that the eye was blind beyond hope of redemption; that in all probability the mass was a malignant tumor which would demand enucleation at the earliest possible moment as a safeguard against metastasis. I suggested consultation, and Dr. A. E. Jackson studied the eye with me, with identical conclusions and recommendations. The desire for further consultation plus imperative business demands necessitated some delay. In the meantime the patient consulted Dr. Speight Jenkins and Dr. Oscar Marchman of Dallas, who confirmed our diagnosis and recommendation. The eyeball was enucleated December 20, together with a half centimeter of the optic nerve. A glass ball was implanted in Tenon's capsule.

The pathologist's diagnosis by Dr. John J. Andujar, follows: "Melanoma of eye. Comment: This tumor was formerly called melanocarcinoma or melanosarcoma. The prognosis is most guarded."

December 22, the glass ball was removed and 5 radium needles implanted in the orbit. A glass shell eye with a central hole instead of a cornea was

placed in the cul-de-sac. The threads from the radium needles were brought out through the hole in the shell eye. The glass shell served the double purpose of protecting the palpebral conjunctiva from contact with the radium needles and of maintaining and shaping the cul-de-sac. The needles were left in place eight days for a total of 1,060 mg. hours. Meanwhile x-ray irradiation was carried out by Dr. O'Bannon to the extent of 2,010 *r*-units.

A moderate degree of skin irritation persisted for two or three weeks. An artificial eye was inserted and has been worn comfortably since then.

At the patient's request a second pathological opinion was secured from Dr. J. L. Goforth, dated January 4, 1944, who described the microscopic appearance and commented as follows: "This tumor has grown by the process of expansion, and is in the intra-ocular stage of growth. I see no evidence of actual invasion of the retina, choroid, or sclera. It is pointed out, however, that tumors of this type tend to metastasize via the blood stream. The possibility of metastasis already having occurred must be kept in mind and a guarded prognosis should be given. Time alone will determine the matter of permanent cure. The tumor is appraised as being strongly irradiation resistant. Pathological diagnosis: Malignant melanoma, irradiation resistant, intra-ocular stage of growth."

SUMMARY AND CONCLUSIONS

Two cases of intra-ocular malignant melanoma are presented, the first unsuspected before enucleation of a glaucomatous eye, and the second diagnosed clinically before enucleation.

Abundant opportunity for metastasis exists when diagnosis is made late. There may be some excuse for late diagnosis in eyes with opaque media. There is little excuse for late diagnosis in eyes with transparent media.

The patient himself may be culpable in that he ignorantly, or for reasons of economy, may have employed an optometrist—a self-styled "specialist in eye care," as happened in the second case reported in this paper.

The optometrist who fails to send his pathological cases to an oculist is to be severely condemned. The inadequacy of optometrists as diagnosticians is evidenced by the experience of my second patient.

Consultation between oculists may throw additional safeguards about patients with difficult diagnostic problems.

The value of irradiation of the orbit after enucleation of a melanomatous eyeball is debatable; but the failure to irradiate after enucleation might subject the medical attendant to criticism, should metastases occur.

As cases increase in number, detailed studies are developing statistical tables upon the basis of which a more certain prognosis can be given.

In the group reported by Callender et al.[4] "among the patients who died as a result of metastasis, the shortest postoperative period was two days, and the longest 17 years, and the average 37 months."

The dictum of Fuchs that all blind painful eyes should be enucleated ought to be followed by all oculists, because of the possibility that there may have developed in the blind eye a malignant melanoma.

REFERENCES

1. Albers, E. C.: Benign Melanomas of Choroid and Their Malignant Transformation, Am. J. Ophth. 23:779-783 (July) 1940.

2. Asbury, M. K., and Vail, D.: Multiple Primary Malignant Neoplasms; Report of Case of Malignant Melanoma of Choroid and Glioblastoma Multiform of Right Cerebral Hemisphere, Am. J. Ophth. 26:688-693 (July) 1943.

3. Benedict, W. L.: Clinical Considerations of Melanotic Neoplasms of the Eye and Orbit, Surg., Gynec., & Obst. 64:513-516 (Feb. No. 2A) 1937.

4. Callender, G. R., Wilder, H. C., and Ash, J. E.: Five Hundred Malignant Melanomas of Choroid and Ciliary Body Followed Five Years or Longer, Am. J. Ophth. 25:926-967 (Aug.) 1942.

5. Dawson, J. W.: Melanomata, their Morphology and Histogenesis: Study of Cell Origins and Transformations with Critical Discussion on Aspects of Tumor Growth and Clinical Review, Edinburgh M. J. 32:501-732 (Oct) 1925.

6. Friedenwald, H., and Friedenwald, J. S.: Melanosis of Lids, Conjunctiva and Sclera with Wartlike Growths on Iris, Arch. Ophth. 54:51-54 (Jan.) 1925.

7. Ostrom, M. L.: Three Interesting Intraocular Tumors (Malignant Melanomata), Illinois M. J. 72:331-335 (Oct.) 1937.

8. Reese, A. B.: Intra-ocular Tumors, South. Surgeon 7:194-203 (June) 1938.

9. Rones, B.: Early Diagnosis of Choroidal Melanomas, Am. J. Ophth. 25:39-42 (Jan.) 1942.

10. Samuels, B.: Study of Anatomic and Clinical Manifestations of Necrosis in 84 Cases of Choroidal Sarcomas, Arch. Ophth. 11:998-1,027 (June) 1934.

ABSTRACT OF DISCUSSION

Dr. A. E. Jackson, Fort Worth: Dr. Schenck has made an excellent presentation of a most interesting subject. Unfortunately in the past, many of the cases reported in the literature have been overlooked on account of a lack of uniformity in nomenclature. Within the past few years with the common use of the name melanoma, more cases are being collected, and as a result more is being learned in regard to the frequency, characteristics and prognosis of the condition. There is no doubt but that the mortality can be greatly lessened by early diagnosis and enucleation of the involved eye. For the ophthalmologist who suspects a melanoma and the relatives of the patient who possesses it I know of no greater comfort than a thorough consultation with a confrere in regard to diagnosis and treatment. In those eyes in which it is possible to view the fundus, regular periodic studies of the lesion are very valuable, especially when accompanied by perimetric studies and retro-orbital transillumination. After the eye has been removed and studied by the pathologist, it has been my experience that his report in addition to the pathologic diagnosis oftentimes makes the note that the melanoma is irradiation resistant. This does not excuse the ophthalmologist from advocating the use of radium and deep therapy postoperatively; although their benefit is still questionable it is a source of satisfaction to the relatives to know that they have been used, and at the same time their use may save the doctor undue criticism.

Dr. Lester H. Quinn, Dallas: Dr. Schenck has given us an excellent review of the recent literature on melanoma and has presented two interesting and instructive cases.

In regard to irradiation following enucleation I do not believe a doctor would be criticized in medical circles for its omission. Recurrence in the orbit is rare and metastasis to other parts of the body may have occurred very early. This tumor is very irradiation resistant.

When a malignant melanoma is discovered early while vision is unaffected and before pain occurs, a real responsibility is placed upon the doctor to convince the patient the eye should be removed.

This paper should make us more careful in our

examination of patients, a warning we all need in these busy days.

Dr. E. L. Goar, Houston: I do not believe it is necessary or advisable to use radium or x-ray radiation to the orbit following enucleation for intraocular malignant melanoma. Metastasis takes place through the Vena vorticosa or the anterior ciliary veins and it is quite improbable that radiation would catch the cells in transit. Implantation of intraocular malignana melanoma in the orbit is very rare, and I doubt if it occurs except in advanced cases where the neoplasm has broken through the sclera. I have never seen it but once and that was in a case of long standing with massive involvement of the choroid and ciliary body.

Dr. Ray K. Daily, Houston: An early diagnosis and an enucleation is a life-saving procedure in melanoma of the uvea. When the growth is large, the retina detached, and vision destroyed one can recommend an enucleation without hesitation. To recommend an enucleation of an eye with very good visual acuity and only a scotoma in the visual field is quite a responsibility. Three weeks ago I enucleated an eye with 20/40 vision, which contained a comparatively small melanoma temporally and below the macula. In this case, retrobulbar transillumination was of great help, because it demonstrated the dark shadow cast by the growth. In doubtful cases Lindner recommended trephining over the tumor, excising a piece of tissue, and having a frozen section examined microscopically. Such a procedure requires very fine pathologic equipment which is not always available.

Dr. C. S. Sykes, Galveston: There are two points I should like to emphasize with regard to Dr. Schenck's paper.

One is that in a unilateral case of glaucoma where an adequate view of the fundus cannot be obtained we should always consider the likelihood of an intraocular tumor, and if the eye is blind and painful it should be removed, even though transillumination is negative.

The other point I want to emphasize is the advisability of retro-transillumination. I have found the instrument devised by Lancaster very valuable for this purpose. With just a small cut through the conjunctiva and Tenon's capsule, the light can be placed behind the eyeball.

PENICILLIN FOR MENINGOCOCCEMIA

The prompt administration of penicillin in the case of a Waterhouse-Friderichsen syndrome (a sudden and severe infection due to the presence of meningococcic bacteria) accounts for at least one favorable recovery, J. M. Hayes, M. D., Los Angeles, and John F. Whalen, M. D., Altadena, Calif., report in *The Journal of the American Medical Association* for March 17. With the increasing prevalence of meningococcic meningitis there also has been an associated rise in the number of cases of the so-called Waterhouse-Friderichsen syndrome.

As a method of tuberculosis case-finding, the screening of large groups of apparently healthy individuals by means of chest x-rays is here to stay. It should not replace the recognized routine methods of case-finding by means of examination of individuals who have been in close association with tuberculous patients or who have symptoms referrable to the lungs. Rather, it should serve as an excellent auxiliary method for the discovery of new cases and in that way provide to health departments many additional opportunities for the promotion of their tuberculosis control programs.—William Siegal, M. D., "Health News," Nov. 13, 1944.

PRACTICAL PUBLIC HEALTH PROCEDURES IN THE CONTROL OF SOME OF THE MORE COMMON COMMUNICABLE DISEASES

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The group of disorders known as the communicable diseases is often badly handled by the part-time health officer. Even the otherwise well organized full-time health department is thrown out of gear and makes much ado about what should be a simple public health function.

In the eyes of the public, both the part-time and the full-time health official is employed primarily to control communicable diseases. This, though erroneous, is probably the reason these poorly paid employees become ill at ease when "contagion" appears in the community.

There are hurdles to cross, of course, but the general public is becoming intelligent and will follow reasonable instructions without shotgun and pest-house quarantine. The busy practitioner is willing to divide the responsibility of handling situations when the public is involved. He simply does not have the time nor should he be expected to do epidemiological surveys, follow up contacts, and give explicit instructions in concurrent and terminal disinfections; nor should he be "put on the spot" when a selfish family wishes special privileges when quarantined. The well regulated family is anxious to know facts concerning the disease in question, and when properly instructed will usually make every practical effort to cooperate. Health departments should welcome the opportunity to get into the home of every case and contact. The smart doctor will call the health department at once and have the director consult with him at the patient's home, so that there can be no misunderstanding on anyone's part. He should definitely place the problem of control upon the persons who are responsible and not interfere with its orderly performance. The Texas Sanitary Code is so out of date that it is hard to follow it explicitly. Laws are of little avail, anyway. Instructions will usually be followed if reasons given are properly understood. The term "Health Officer" is a misnomer. The one so designated really has no greater enforcement power than has any other citizen in a community. He can only place a placard, give instruction with regard to its meaning, and furnish expert testimony before the proper court. Persuasion is his most useful weapon. If he wishes

enforcement he must call upon a peace officer.

There are several authorities from which communicable disease information may be obtained. The Army, the Navy, and the Public Health Service publish slightly different versions. Each state and many cities have original ideas in their sanitary codes and ordinances. Some are rather antiquated; some perhaps so advanced as to require modification. All, however, for practical purposes are so alike that persons from one section will have little trouble conforming to the rules of another.

The sub-committee on communicable disease control of the Committee on Research and Standards of the American Public Health Association has been responsible for a text which has been officially approved by the Association and by the U. S. Public Health Service. This is perhaps the most accepted standard text on the subject. It is published as Reprint No. 1697, Public Health Reports, and may be purchased for ten cents from the U. S. Government Printing Office, Washington, D. C. Every physician and health worker should have a copy of this bulletin. The terms are defined in the text. Each disease is briefly described with regard to its clinical and laboratory recognition: etiological agent, source of infection, mode of transmission, incubation period, period of communicability, susceptibility and immunity, and prevalence. Following are described methods of control; first, those affecting the individual, contacts and immediate environment; and second, general and specific measures bearing upon the control or prevention of the disease in question.

This reprint is so well arranged that this paper will be worthwhile if no other thought is left with the hearers than that he should have a copy on his desk constantly. Such orderly outlines seem at times to frighten and confuse the uninitiated while in actuality, though the language is a little stiff and bookish, the material, when properly interpreted, is simple. There are shades of interpretation of special situations which are not practical in such concise publications. Too, controversial points are entirely absent.

The average householder and even the average health officer need not memorize a list of "Do's" or "Don'ts" for each specific disease such as are outlined in current texts, but every school child and parent should know common principles of safety from communicable diseases. They are so few and simple that when in doubt with regard to a suspected disease, precautions may be taken for them all without seriously inconveniencing usual schedules.

TABLE 1.—*List of Diseases With Pertinent Facts Concerning Their Control.*

Disease	Source	Transmission	Incubation	Isolate Patient	Quarantine Contacts	Immunize
Actinomycosis	Animals	Discharges	Variable	Lesions	None	None
Anthrax	Animals	Discharges	Under 7 d.	Lesions	None	None
Chicken Pox	Skin & M.M.	Discharges	2-3 wks.	From Non-Im.	None	Passive
Cholera	Bowels	Food & Flies	1-5 d.	Screen, Lab. Pos.	Non-Im. 5 d.	Active
Dengue	Blood	Mosquito	3-15 d.	Screen—5 d.	None	None
Diphtheria	Respiratory	Contact	2-5 d.	Lab. Pos.	Non-Im. 5 d.	Active
Dysentery	Bowels	Food & Flies	1-7 d.	Yes, Lab. Pos.	Lab. Pos.	None
German Measles	Respiratory	Discharges	14-21 d.	From Non-Im. 7 d.	None	None
Gonorrhea	Genitals	Intercourse	3-8 d.	Lab. Pos.	Lab. Pos.	None
Hookworm	Bowels	Night Soil	2 wk.-up	Sanitary Toilet	None	None
Influenza	Respiratory	Discharges	24-72 hr.	Acute Stage	None	None
Leprosy	Skin & M.M.	Discharges	1 yr.-up	Leprosorium	None	None
Malaria	Blood	Mosquito	14 d.	Screen, Lab. Pos.	Quinine	Quinine
Measles	Respiratory	Discharges	10-15 d.	From Non-Im. 9 d.	Non-Im. 14 d.	Useful
Meningitis	Respiratory	Discharges	2-10 d.	Yes, Lab. Pos.	Lab. Pos.	None
Mumps	Respiratory	Discharges	12-26 d.	From Non-Im.	None	None
Plague	Rodents	Fleas	3-14 d.	Screen	7 d.	None
Poliomyelitis	Secretion	Filth	7-14 d.	Placard—Acute	14 d.	None
Scarlet Fever	Respiratory	Discharges	2-7 d.	Placard—3 wk.	7 d.	Active
Small Pox	Skin & M.M.	Discharges	8-16 d.	Placard—Lesions	Until Vacc.	Active
Syphilis	Genitals	Intercourse	3-6 wks.	Contact 3-24 wk.	Lab. Pos.	None
Tuberculosis	Respiratory	Discharges	Variable	Lab. Pos.	None	None
Tularemia	Rodents	Blood, Flies	1-10 d.	None	None	None
Typhoid	Bowels	Food, Flies	3-38 d.	Screen, Lab. Pos.	None	None
Typhus	Rats, Man	Fleas, Lice	6-14 d.	Vermin	None	None
Undulant	Animals	Milk, Meat	6-30 d.	None	None	None
Whooping Cough	Respiratory	Discharges	7-16 d.	From Non-Im. 3 wk.	Non-Im. 14 d.	Useful
Yellow Fever	Blood	Mosquito	3-6 d.	Screen Room 7 d.	Non-Im. 6 d.	Active
Common Cold	Respiratory	Discharges	12-72 hr.	Yes, Sympt.	None	None
Food Infection	Infected Food	Filthy Foods	Few hrs.	None	None	None

The disorders designated as communicable are caused by infecting agents such as bacteria, protozoans, spirochetes, parasites, and the filterable viruses. These have vehicles by which the agents are carried from the diseased to the susceptible. Control is a matter of elimination of the agent, isolation or elimination of the vehicle, or immunization or isolation of the susceptible person.

The school teacher's simple rules of health, if strictly followed, will accomplish most of what is needed in disease control, no matter by what name they are called. These are: "Eat proper food, breathe fresh air, get some sunshine daily, regulate exercises, secure sufficient rest, and be clean in person and en-

vironment." To these may be added pest control, specific immunizations and keeping susceptibles at least five feet from acutely sick persons or animals and all secretions or objects soiled by them.

Sources from which disease organisms are obtained may be divided into the following classes for explanatory purposes: (1) respiratory secretions, (2) bowel discharges, (3) direct contact, (4) insects, and (5) filthy foods and drinks. As may readily be seen, each of these will respond rather well to clean habits. This term should include all of the various means available to impress upon all members of the community, young and old, by spoken and printed word, and by illustration and suggestion the necessity of: (1) keeping the body clean by sufficiently frequent soap and water baths; (2) keeping hands and unclean articles or articles which have been used for toilet purposes, away from mouth, nose, ears, and genitals until thoroughly washed; (3) avoiding the use of unclean eating, drinking, or toilet articles, such as towels, handkerchiefs, drinking cups, pipes, and toys, (4) avoiding exposure of persons to sprays from the nose and mouth; (5) avoiding direct or indirect contact with all pests, such as flies, mosquitoes, gnats, roaches, rats and lice, and (6) eating and drinking only food which has not been exposed to filth before or after preparation.

Susceptibility depends upon: (1) vital resistance, (2) acquired immunity from having come in contact with the causative factor before, and (3) by active or passive immunizing products. None of these gives 100 per cent protection but for practical purposes each is considered in the problem of control. Persons and communities with lowered vitality contract diseases easily and the outbreaks are often virulent. Many are involved who were protected by having had the disease or by vaccination. A large number are found with immunity following an outbreak of a disease in a community, although many persons apparently protected had not been actually ill. Where a large percentage of any group is artificially immunized against typhoid, smallpox, diphtheria, tetanus, yellow fever and so forth, the disease seldom appears and is never in epidemic proportions.

The most troublesome part of disease control to the health officer is that function designated as quarantine. To the intelligent health worker quarantine as interpreted by the average citizen is not necessary. Some practitioners have reached this conclusion, also, and do not see the necessity of reporting their cases; this is a mistake—reporting, epidemiological surveys, and practical instructions to the family are all essential for effective control. If cases are promptly reported, those responsible properly instructed, and recognized procedures are followed, placards, pest-house care, shotgun quarantine and other barbaric penalties should be decreased.

For example, a person who refuses to be vaccinated and is careless enough from a sanitary standpoint to get the virus of smallpox should have little sympathy from the public. However, our complex system of throwing many persons into close proximity with each other in schools, theatres, restaurants, barber shops, factories, and so forth, places part of the responsibility back on the public. Epidemics will be few with proper education by health workers upon the responsibility of individuals; constant guarding of public places to see that employees are immunized, clean and free of disease, and maintenance of groups who are orderly in their lives. To satisfy the old school and to handle the careless and the stubborn, health departments will be compelled for an indefinite period to limit the movements of those infected with communicable diseases and their contacts. The most important reasons for reporting are in order that health workers may make a survey to find where a disease comes from, so that they may isolate this source from others, and ferret out all contacts and limit their movements until the incubation period is past, or until they have recovered from the disease themselves.

The recommendations which I give health officers and directors over the state are:

1. Visit each doctor in the jurisdiction and explain the importance of his promptly reporting all cases suspected of having a contagious disease by name and address so that (a) an accurate local record may be maintained; (b) proper reports may be sent to the State Epidemiologist; (c) federal reports of disease incidence may be more accurate; and (d) proper control measures may be instituted.

2. Supply each physician with a copy of the county and state weekly compilations upon reportable diseases.

3. Promise practitioners that if they will report cases by name and address you will (a) visit cases with or without them to substantiate the diagnosis and give recognized instructions; (b) make epidemiological surveys to determine where other cases are; (c) ferret out and properly instruct, isolate, and when possible, cause to be immunized, all contacts; (d) supplement the physician's instructions upon concurrent and terminal disinfection; (e) notify school principals and work superintendents; (f) instruct dairies, grocers, laundries, and neighbors; (g) place and remove a quarantine placard when required by law; (h) give releases to members of affected families; (i) assist in arranging suitable facilities for maintaining isolation in another home or part of home for persons who come into contact with food and children; (j) warn families against carelessness, urging them to call the family physician for advice on each new change in physical condition of patients, whether good or bad, and to call the health department concerning possible changes in quarantine instructions.

4. Visit each school superintendent in the community and ask his cooperation in disease control and have him (a) report each first case of suspected contagion by phone or postcard, giving name and address; (b) report subsequent cases weekly, by number; (c) instruct teachers to ferret out children with sore throats or other questionable symptoms, having them remain away for three days after which they may return if well or notify health workers if not well.

5. Promise the superintendent that health workers will handle in such a way as to prevent spread, when possible, of the more serious diseases to be managed by (a) quarantine; (b) throat cultures from contacts; (c) epidemiological survey; (d) follow up contacts and isolation or immunization; (e) morning inspections for seven days; and (f) instruction of parents through circulars and the press.

Health workers should welcome an opportunity to get into a home where there is a contagious disease. They can teach public health at this better than at any other time. Questions and suggestions will bring out: (1) how to recognize the disease; (2) germs causing the disorder; (3) source of the infection; (4) mode of transmission; (5) incubation period; (6) period of communicability; (7) immunity status; (8) prevalence, and so forth.

The old method of establishing quarantine was to send a policeman to tack up a card with the instructions, "Stay in for six weeks," "If you get hungry call the Charity Department." In the public health plan the health workers make their entry as advisors, and questions regarding control come easily into the conversation. If the disease is a dangerous one, the worker may give such instructions as (1) isolate the patient in a room away from family—the nurse (or mother) is to wash her hands and change her apron before coming into contact with others, and so forth; (2) working members of the family may leave the placarded home if they do not come in contact with food or children—if necessary, they should maintain a separate residence—all others must stay on the premises unless the patient is in charge of a graduate nurse; and (3) call the health department for special instructions on how to (a) do concurrent and terminal disinfection; (b) handle milk bottles; (c) send out laundry; (d) get a haircut; (e) take a special school examination; or (f) bury the patient, in case of death.

In making extra family contacts, many ask pertinent questions. The whole neighborhood is thus taught principles of prevention and disease control. Smart health directors take advantage of even mild outbreaks of disease to: (1) visit as many homes as possible; (2) distribute circulars and tracts upon the specific disease; (3) publish informative articles over radio and through the press; (4) establish immunization clinics; and (5) institute clean-up programs.

I am often asked if the part-time health officers should attempt to carry out programs such as suggested here. My answer is that some do rather good work, especially where there are no full-time personnel. Usually, however, the part-time health officers do little more than take care of their own cases, and they ask the other doctors of the community to take care of theirs. Most weekly reports to the State Health Department are only those of the health officers themselves. Little, if any, epidemiology or contact tracing is done by them. If an epidemic becomes too bad they ask the taxing bodies for additional funds for help. Cases finally immunize a greater part of the community and the epidemic disappears, probably leaving several citizens in graves and others maimed for life. "For the want of a nail the shoe is lost; for the want of the shoe the horse is lost; for the want of the horse the rider is lost; for the want of the rider the battle is lost."

If there are trained health workers the entire medical fraternity should turn the control of contagion over to them and see that they carry out a satisfactory program. The average practicing physician is not trained in health control measures and should not infringe upon the health specialist's field any more than the public health official should infringe upon the treatment field.

If there are no trained public health workers in a community, the practicing physician should be the first to go before appropriating bodies and demand a well organized health set-up, consisting of a well trained medical director and one or more trained nurses and sanitarians, depending upon the size of the population and problems with which they will be confronted. Such a group, if properly supervised, will beyond any question of doubt prevent illness and death in any community where employed. No money spent upon policeman, sheriff, firemen, part-time health official or others from local funds will yield nearly proportionate returns in the control of the health and welfare of a community.

No paper upon the subject of contagious disease control would be complete without a chart of the leading diseases dealt with and some simple facts concerning them. The accompanying table though not complete, is submitted as an outline.

ABSTRACT OF DISCUSSION

Dr. R. B. Wolford, Fort Worth: I want to congratulate Dr. Prothro on this most practical paper, and I concur in the principles given. I want to stress three points. It is impossible to have a successful public health program without the support of the medical profession. The Health Director should be active in his local medical society and get his programs approved by the medical society before putting them into operation.

School teachers can be very valuable in communi-

cable disease control if they are properly instructed in making inspections of their pupils.

I am convinced that exhaustion and other conditions causing lowered bodily resistance precipitate a good many cases of poliomyelitis in persons who might otherwise have sufficient immunity to throw off the infection. Records show that President Roosevelt fought a fire for a few hours, then took a swim in the ocean and his poliomyelitis symptoms began the next day. One of our first cases in Fort Worth last summer was in a child whose symptoms began the next day after completing a train trip to California. Another case started three days after a child broke his leg.

I observed conditions similar to those stated so often in our epidemic at Fort Worth that when people would ask about taking children out of town, I would tell them I was more afraid of a tiring trip than I was of home exposure, so I advised against the trip and instructed them in home care of their children.

MALIGNANT EPITHELIAL TUMORS IN YOUNG AGE GROUPS

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It is not our purpose in this brief paper to record a series of isolated examples of the occurrence of malignant tumors in young persons, or to make an exhaustive review of the literature of this subject. We hope, however, to call attention to and counteract somewhat, the unfortunately still widespread opinion that carcinomas in young people are so uncommon as to be medical curiosities. It is generally accepted that some types of tumors, particularly many of the sarcomas, are most frequent in young patients; but all too often carcinoma in youth is overlooked because of a low index of suspicion.

From time to time there have been isolated reports of carcinoma occurring in infants and children or in early adult life and some more extensive reviews on this subject.[9, 5, 2] We have seen and can recall from memory in recent years a carcinoma of the vulva in a woman of 27 years, carcinoma of the cervix in a woman of 20, many examples of carcinoma of the cervix below the age of 30, carcinoma of the breast at age 23, a carcinoma of the lung at age 22, and adenocarcinoma of the ascending colon in a child of 11 years, to mention only a few. In the majority of cases where carcinoma has been found in these young persons there has been delay in diagnosis attributable in part at least to the widespread belief that carcinoma is a disease of later life.

It has often been noted and the impression is generally held that carcinoma occurring in young persons shows an unusually rapid rate of growth, and that the ultimate prognosis is probably less favorable than in old age. As Phifer[8] remarked in his review of 49 cases of carcinoma of the rectum and sigmoid in patients below 20 years of age, the "rapidity of evolution of the cancer" was an impressive feature. He noted that from the time of first symptoms until death, rarely more than seven or eight months elapsed. Fowler[5] also felt that the epithelial tumors showed increased malignancy in the young and suggested in his summary that lack of hyalinization, fibrosis, lymphocytic infiltration and lack of cell differentiation might account for the difference. In speaking of carcinoma of the breast, Ewing[4] notes that very active, anaplastic and atypical carcinomas usually develop in comparatively young women, and further observes that pregnancy usually is unfavorable. It is, of course, somewhat difficult to evaluate the effect of age upon prognosis with any precision, but it is difficult to escape the conclusion that the prognosis in carcinomas is distinctly less favorable in youth. It is possible, however, that the unfavorable outlook may be due, in part at least, to delays in recognition of lesions in young persons which would be immediately suspected in persons in the so-called "cancer age." Phifer,[8] in speaking of diagnosis of cases in the group reviewed by him, made the interesting statement that "The young age of the patient generally excluded the idea of cancer."

In one series of over 300 cases of carcinomas of the cervix studied by one of us, the age of the patient was known and available in 251. Of this group whose ages were obtained, 21 were 30 years of age or less. Lynch[7] indicates that the maximum incidence of carcinoma of cervix occurs between 40 and 45 years of age. He quotes other statistical studies which indicate that figures vary in different series from 3.5 per cent to 5 per cent incidence in the third decade. In the group of cases mentioned above the distribution by ages was as noted in table 1.

TABLE 1. *Ages of Patients in Cases of Malignancy.*

Age	21	22	23	24	25	26	27	28	29	30	Above 30
No. Cases	1	1	0	1	1	2	1	3	3	8	230

It is seen by this table that 8.3 per cent of the cases occurred in patients 30 years of age or less. If only those 29 years or less are considered, the incidence becomes slightly more than 5 per cent. Diddle[3] in a series of 505 cases of carcinoma of the cervix reported that 5 had developed in patients less than 25 years of age, one being 17 years of age, and indicated an impression that the prognosis of this type of cancer before 20 years of age is grave because of the accelerated growth impulse in malignant tumors during the

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growing years. Warthin's[9] review of a series of 195 malignant tumors of all types in patients in the 1 to 30 age group, included 12 carcinomas of the cervix.

Fowler[5] in his series of cases noted seven examples of carcinoma of the breast in patients less than 26 years of age. In a group of 82 consecutive cases of carcinoma of the breast which we have analyzed, in which the age was known, 3 or 3.6 per cent occurred in patients below the age of 30 years. The age distribution was as given in table 2. Complete and final follow-up information was available in only one of these cases. In this patient (age 26), the entire course from the first realization that a nodule existed in the breast, to the death of the patient with widespread lung and skeletal metastasis, was only eleven months.

TABLE 2. *Ages of Patients With Breast Cancer.*

Age	21	22	23	24	25	26	27	28	29	30
No. Cases	0	0	0	0	0	1	1	1	0	0

In 26 consecutive cases of carcinoma of the ovary recently examined by one of us, 2 patients were found to be less than 30 years of age. One was 29 and the other 25 years of age.

At this time we don not have sufficient clinical data to be able to say that in any of the cases studied by us that there is any significant difference in signs or symptoms of carcinoma in young persons, which would tend to complicate or confuse the diagnosis. It is our opinion that the same evidences of the disease, in the cervix and breast at least, would be as likely to occur in this group as in older patients. It has been observed in the analysis of several series of carcinomas of the large intestine in young persons, however, that there may be definite differences in the symptoms in the different ages. Laird[6] in a review of 18 cases of carcinoma of the colon in children under 15 years of age, which had been reported from 1878 up to the time of his article, pointed out that the most common symptom was abdominal pain and somewhat less frequently vomiting and constipation. Only 2 patients gave histories of bloody stools, which is in rather striking contrast with the frequency of bleeding in adults with carcinoma of the large bowel. Fowler[5] in his group of 21 cases of carcinoma of the large intestine observed, however, that signs and symptoms were similar to those of older persons, but were actually more definite and of greater intensity. Another comparative observation made by Phifer[8] in a review of 49 reports of cancer of the rectum and sigmoid in patients under 20 years, noted that pain was usually the earliest symptom. This finding is also supported by Bacon and Sealy,[1] who reviewed 123 cases of carcinoma of anus, rectum and sigmoid in patients below the age of 20 years. In this review, abdominal pain rather than bleeding was the most frequent symptom. It is, therefore, possible that in malignancy of the large intestine there may be clinical differences which may somewhat complicate the matter of diagnosis, but we suspect that these additional difficulties of diagnosis do not exist in other regions of the body except in so far as there may exist psychological barriers against inclusion of malignant tumor in the list of differential possibilities when the patient is young.

In regard to the matter of etiology of cancer in youth, there is no very promising lead. Indeed the problem may be made more difficult by the recognition of the frequency with which carcinoma appears in early life. Fowler[5] makes the statement that "Heredity is considered to be the greatest etiological factor in carcinomas in the young." We are inclined to feel that the same factors, whatever they may be, are operative and responsible for tumor growth in the young as in the old.

It is our feeling that the phrase "cancer age" should be dropped from medical thinking as treacherous and misleading. It is certainly undeniable that most carcinomas do tend to occur in older age groups, but it seems to us that this is not sufficient reason to lower the "index of suspicion" for cancer when patients are children or young adults. Malignant tumors develop in this group with sufficient frequency to require inclusion of cancer in any list of differential possibilities. Like syphilis, frequency of diagnosis may depend considerably on the degree of suspicion of the examiner.

SUMMARY

Attention is called to the fairly frequent incidence of carcinoma occurring in young persons. A series of carcinomas of the cervix, uteri, breast and ovary (groups not taken from the same laboratory, or in the same time intervals) are used as illustrations.

REFERENCES

1. Bacon, H. E., and Sealy, W. B.: Malignancy of Anus, Rectum and Sigmoid Colon in the Young, Am. J. Surg. 45:339-347 (Aug.) 1939.
2. Bowing, H. H., and McCullough, J. A. L.: Carcinoma of the Cervix Uteri in Childhood and Adolescence; Review of Literature and Report of Additional Instance of Lesion in Girl Age 13, Am. J. Roentgenol. 45:819-825 (June) 1941.
3. Diddle, A. W.: Carcinoma of the Cervix before the Age of Twenty Years, Am. J. Cancer, 39:207-210 (June) 1940.
4. Ewing, J.: Neoplastic Diseases, Philadelphia, W. B. Saunders Company, 1940.
5. Fowler, L. H.: Malignant Epithelial Neoplasms, Carcinoma and Epithelioma Occurring in Persons under Twenty-Six Years of Age, Surg., Gynec. & Obst. 43:73-84 (July) 1926.
6. Laird, T. K.: Carcinoma of the Colon in a Child of Fourteen Years, with a Review of the Literature, Am. J. Surg. 53: 335-339 (Aug.) 1941.
7. Lynch, F. W.: Carcinoma of the Uterus, Chapter 13, in Davis, C. H.: Gynecology and Obstetrics, Hagerstown, Maryland, W. F. Prior Company, 1936.
8. Phifer, C. H.: Cancer of the Rectum and Sigmoid in Childhood and Adolescence, Ann. Surg. 77:711-720 (June) 1923.
9. Warthin, A. S.: The Occurrence of Malignant Neoplasms in the Young, Arch. Int. Med. 15:444-450 (March) 1915.

MISCELLANEOUS

COMING MEETINGS AND CLINICS

State Medical Association of Texas. Dr. H. F. Connally, Waco, President; Dr. Holman Taylor, 1404 W. El Paso St., Fort Worth, Secretary.

American Medical Association. Dr. Herman L. Kretschmer, Chicago, President; Dr. Olin West, 535 North Dearborn Street, Chicago, Secretary.

Southern Medical Association. Dr. Edgar G. Ballenger, Atlanta, Ga., President; C. P. Loranz, Empire Building, Birmingham, Alabama, Secretary-Manager.

Southwest Allergy Forum. Dr. Ralph Bowen, Houston, President; Dr. George Owen, 910 North State St., Jackson, Miss., Secretary.

Texas Ophthalmological and Otolaryngological Society, San Antonio, December 7-8. Dr. M. K. McCullough, Dallas, President; Dr. E. D. Dumas, San Antonio, Secretary.

Texas Radiological Society. Dr. Palmer E. Wigby, Houston, President; Dr. Asa Seeds, Dallas, Secretary.

Texas Club of Internists. Dr. Merritt B. Whitten, Dallas, President; Dr. Julian C. Barton, 414 Navarro St., San Antonio, Secretary.

Texas Association of Obstetricians and Gynecologists, San Antonio, fall, 1945. Dr. Allen Stewart, Lubbock, President; Dr. Julius McIver, 1314 Medical Arts Building, Dallas, Secretary.

Texas Pediatric Society. Dr. Frank H. Lancaster, Houston, President; Dr. John Ashby, Dallas, Secretary.

Texas Neuropsychiatric Association. Dr. Titus Harris, Galveston, President; Dr. Fred Rogers, Dallas, Secretary.

Texas Railway and Traumatic Surgical Association. Dr. W. B. Reeves, Greenville, President; Dr. Ross Trigg, First National Bank Building, Fort Worth, Secretary.

Texas Society of Pathologists, Dallas, Jan. 27, 1946. Dr. Paul Brindley, Galveston, President; Dr. John J. Andujar, 1300 W. Cannon Ave., Fort Worth, Secretary.

Texas State Heart Association. Dr. Victor E. Schulze, San Angelo, President; Dr. Walter B. Whiting, Wichita Falls, Secretary.

Texas Dermatological Society. Dr. Lewis Pipkin, San Antonio, President; Dr. Duncan O. Poth, 1230 Nix Professional Building, San Antonio, Secretary.

Texas Surgical Society, San Antonio, October. Dr. Sam Weaver, Dallas, President; Dr. Walter Stuck, 1426 Nix Professional Building, San Antonio, Secretary.

Texas Association of Medical Anesthetists. Dr. E. D. Embree, Houston, President; Dr. R. A. Miller, 1415 Nix Professional Building, San Antonio, Secretary.

Texas Society of Gastro-enterologists and Proctologists. Dr. James J. Gorman, El Paso, President; Dr. George M. Underwood, 4105 Live Oak Street, Dallas, Secretary.

Texas Society for Mental Hygiene. Dr. Charles W. Castner, Capitol Building, Austin, President; Miss Jennie S. Wilmot, University of Texas, Austin, Secretary.

Texas Orthopedic Society. Dr. E. A. Cayo, San Antonio, President; Dr. Edward Smith, Houston, Secretary.

Texas Tuberculosis Association. Dr. J. B. White, Amarillo, President; Miss Pansy Nichols, Austin, Executive Secretary.

Texas Public Health Association. Dr. George A. Gray, Sweetwater, President; Mr. Alan C. Love. City Hall, Waco, Secretary.

Texas Chapter American College of Chest Physicians. Dr. S. E. Thompson, Kerrville, President; Dr. Elliott Mendenhall, Dallas, Secretary.

Texas Hospital Association. Lawrence Payne, Baylor Hospital, Dallas, President; Miss Madelyne Sturdavant, Methodist Hospital, Dallas, Secretary.

Third, Panhandle, District Medical Society, Amarillo, April 10-11. Dr. D. D. Cross, Lubbock, President; Dr. George Powers, Amarillo, Acting Secretary.

Fourth District Medical Society, Brownwood, 1945. Dr. V. E. Schulze, San Angelo, President; Dr. J. M. Horn, Brownwood, Secretary.

Fifth and Sixth, Southwest District Society. Dr. Phil A. Bleakney, Harlingen, President; Dr. C. W. Tennison, San Antonio, Secretary.

Seventh, Austin District Society. Dr. Joe Gilbert, Austin, President; Dr. A. A. Terry, Austin, Secretary.

Eighth, Ninth and Tenth Districts Medical Society. Dr. J. T. Tadlock, Dayton, President; Dr. George W. Waldron, Medical Arts Building, Houston, Secretary.

Eleventh District Society. Dr. C. E. Willingham, Tyler, President; Dr. F. E. Felder, Palestine, Secretary.

Twelfth, Central Texas, District Society, Marlin, July 10. Dr. C. M. Simpson, Temple, President; Dr. R. J. Hanks, Waco, Secretary.

Thirteenth, Northwestern, District Society. Dr. J. W. Foy, Seymour, President; Dr. Joe R. Wise, 1212 W. Lancaster, Fort Worth, Secretary.

Fourteenth District Society, Dallas, June, 1945. Dr. W. C. Morrow, Greenville, President; Dr. R. S. Usry, 1835 Garrett, Dallas, Secretary.

Fifteenth, Northeast, District Society. Dr. Joe D. Nichols, Atlanta, President; Dr. Henry H. Niehuss, Gladewater, Secretary.

HOSPITALS NEEDING INTERNS AND RESIDENTS

Methodist Hospital, Dallas. Capacity 176 beds. C. W. Sensenbach, M. D., Medical Director (2 interns now; 4 interns July 1).

Nix Hospital, San Antonio. Capacity 145; admissions 5,564. Ellen Louise Brient, R. N., Superintendent (1 intern June 1).

St. Paul Hospital, Dallas. Capacity 270 beds. C. W. Sensenbach, M. D., Medical Director (1 intern now; 2 interns July 1).

Wichita General Hospital, Wichita Falls, capacity 135; admissions 4,303. Mrs. Margaret Hales Rose, Superintendent (2 residents needed at once. Salary $175.00 and maintenance).

AMERICAN COLLEGE OF CHEST PHYSICIANS EXAMINATIONS

The American College of Chest Physicians announces that the next written examinations for fellowships will be conducted June 16, at Chicago. Candidates for fellowship in the College, who plan to take the examinations are requested to advise the Executive Secretary of the American College of Chest Physicians, 500 North Dearborn Street, Chicago, Illinois.

BOARD OF OPHTHALMOLOGY

The American Board of Ophthalmology announces that examinations will be conducted at Los Angeles, California, in January, 1946, at the time of the mid-winter course.

Applications for this examination must be filed before September 1. Prospective candidates should write at once to Dr. S. Judd Beach, Secretary, Cape Cottage, Maine.

DETECTING CONTAMINATION BY CHEMICAL WARFARE AGENTS

American troops are protected against the use of contaminated water and food in the event of exposure to chemical warfare agents. Two kits for this purpose have been standardized by the Medical Department: the Kit, Water Testing, Screening; and the Kit, Food Testing, Screening. The latter, which was just standardized last month, can be used to detect chemical warfare agents on both food and food packaging.—S. G. O. Notes, February 15, 1945.

PENICILLIN FOR INFECTION OF THE BLOOD

The recovery of a patient from Staphylococcus albus septicemia, usually fatal in 90 per cent of the cases, has been effected with prolonged penicillin treatment, Robert H. Herbst, M. D., and James W. Merricks, M. D., Chicago, report in *The Journal of the American Medical Association* for March 3.

In the treatment of their patient who had developed septicemia after a kidney operation, the repeated administration of penicillin proved effective after sulfadiazine had failed.

ARMY ACHIEVING SPEEDY EXPANSION OF HOSPITALS

The Army's expansion of its general hospitals by 70,000 beds is being rapidly accomplished through the conversion of existing buildings on hospital grounds rather than through new construction, according to the Office of the Surgeon General.

"At many of the general hospitals," said Brigadier General Raymond W. Bliss, USA, Assistant Surgeon General, "there are well constructed barracks, built with an eye to the future, which were used to house overseas hospital units during their training period. These barracks are now being turned into wards for patients. Permanent barracks, built to house the hospital staff, are also being converted into wards and are being replaced with temporary barracks which can be quickly constructed."

Over 50,000 more patients are being cared for in the Army's general hospitals than was the case three months ago. During the past month about 1,200 casualties arrived from overseas daily.—S. G. O. Notes, March 15, 1945.

LIBRARY NOTES

The package library consists of collections of reprints and other periodical material on various subjects, prepared for lending to members of the Association. Requests for packages should be addressed "Library, State Medical Association of Texas, 1404 W. El Paso Street, Fort Worth, Texas." Twenty-five cents in stamps should be enclosed with the request to cover postage and part of the expense of collecting the material. Only one package may be borrowed at a time, and packages are allowed to remain in the hands of the borrower for 14 days.

Package Service

Packages were mailed from the Library of the State Medical Association to the following during April:

Dr. Ernestine Smith, Amarillo—*Workman's Compensation and Insurance* (7 articles).

Major Roger G. Magruder, Sheppard Field—*Malaria* (14 articles).

Captain Benjamin C. Wallace, Jr., Hondo—*Pneumonia* (6 articles).

Major Herbert H. Harris, Camp Wolters—(1 journal).

Dr. W. F. Hasskarl, San Antonio—*Uterus, excision* (18 articles).

Captain J. J. Hopkins, Waco—*Rickettsia* (11 articles); *Rocky Mountain Spotted Fever* (17 articles).

Southwestern Medical College, Dallas—(2 journals).

Dr. W. Ray Hanna, Wichita Falls—*Fluids* (10 articles).

Dr. C. R. Cockrell, Snyder—*Nails* (24 articles).

Dr. Fred L. Story, Ennis—*Penicillin* (12 articles).

Captain John R. Bower, Camp Hood—*Head, wounds and injuries* (16 articles).

Lt. Col. E. King Gill, Greenville—*Ear, external* (12 articles).

Lt. Col. Guy C. Randall, Temple—(1 journal).

Dr. Dick P. Wall, Galveston—*Eyes, wounds and injuries* (6 articles).

Major M. A. Forbes, Camp Maxey—*Penicillin in Syphilis* (10 articles).

Dr. W. O. Gibbons, Dallas—*Veins, femoral* (13 articles).

Corp. George W. Young, Sheppard Field—(1 journal).

Major David A. Nathan, Camp Maxey—(9 journals).

Dr. W. B. Whiting, Wichita Falls—*Heart, block* (9 articles).

Dr. A. O. McCary, Freeport—*Sex, frigidity* (8 articles).

Ashburn General Hospital, McKinney—13 journals).

Major Lewis T. Bullock, Amarillo—(8 journals).

Dr. John D. Gleckler, Denison—*Osteochondritis, deformans juvenilis* (8 articles).

Dr. Roland F. Knox, Wichita Falls—*Migraine* (18 articles).

Dr. M. T. Knox, Cleburne—*Tropical Medicine* (6 articles).

Accessions

Chicago, Illinois, Year Book Publishers—Hilleboe and Morgan: Mass Radiography of the Chest.

New York, E. P. Dutton & Company—Fishbein, editor: Doctors at War.

Cincinnati, Ohio, Elizabeth Press—Grigg: Medical Woman's Directory.

Baltimore, Maryland, Williams and Wilkins—Feldman: Clinical Roentgenology of the Digestive Tract, second edition.

New York, D. Appleton-Century—Kolmer: Penicillin Therapy.

Summary

Reprints received, 814	Local users, 35
Journals received, 189	Borrowers by mail, 25
Items consulted, 152	Packages mailed, 31
Items taken out, 221	Items mailed, 260

Total items consulted and loaned, 643

MOTION PICTURE LENDING LIBRARY

Motion picture films on medical subjects, 16 mm., both silent and sound, some in color, and suitable for either medical or lay audiences, are available for loan to county medical societies, hospital staffs, or individual physicians, on request. Borrowers will be required to pay only the cost of shipment of the films, by express, with insurance, and for any damage to films while in the hands of the borrower.

Requests for films should be addressed to "Motion Picture Lending Library, State Medical Association of Texas, 1404 West El Paso Street, Fort Worth 3, Texas." A list of available films, with descriptions, will be furnished on request.

The following motion picture films were loaned by the Motion Picture Lending Library of the State Medical Association during April:

Bleeding Tendency, Methods for Determination of (Available through courtesy of Mead Johnson & Company) North Texas State Teachers College, Denton.

Blood Transfusion, the Technique of (Available through courtesy of Mead Johnson & Company) North Texas State Teachers College, Denton.

Globulin Modified Antitoxins (Available through courtesy of Lederle Laboratories, Inc.) Pre-Medical Club, Lamar College, Beaumont.

Health is a Victory (Available through courtesy of the American Social Hygiene Association) Dick Dowling School, Beaumont, and Martin School, Beaumont.

Immunization Against Infectious Diseases (Available through courtesy of Lederle Laboratories, Inc.) Pre-Medical Club, Lamar College, Beaumont.

Infantile Paralysis, Orthopedic Treatment of (Available through courtesy of Mead Johnson & Company) Brazoria County Auxiliary, Alvin.

Modern Nutrition (Available through courtesy of E. R. Squibb & Sons) Cherokee County Medical Society, Rusk, and A. and M. College of Texas, College Station.

Plain Facts (Available through courtesy of American Social Hygiene Association) Dick Dowling School, Beaumont, and Martin School, Beaumont.

Pneumonia, Diagnosis and Treatment (Available through courtesy of Lederle Laboratories, Inc.) Hill County Medical Society, Hillsboro.

Poliomyelitis, Sister Kenny Method of Treatment of (Available through courtesy of Dr. Herbert Hipps, Marlin) Brazoria County Medical Auxiliary, Alvin.

Role of the Public Health Nurse in Tuberculosis (Available through courtesy of Texas Tuberculosis Association) Pre-Medical Club, Lamar College, Beaumont.

Sulfonamide Therapy (Available through courtesy of Lederle Laboratories, Inc.) Pre-Medical Club, Lamar College, Beaumont.

Tuberculosis, Diagnostic Procedure in (Available through courtesy of Texas Tuberculosis Association) Pre-Medical Club, Lamar College, Beaumont.

NEWS

Dallas Medical Service Plan to Expand.—The Medical Service Plan which has been operated in a limited field by members of the Dallas County Medical Society for the past five years, is to be expanded, informs the Dallas *News*. The organization has employed a full-time executive director. The purpose of the non-profit prepaid medical plan is to assist residents of Dallas County in the low income group to obtain medical services when needed by the payment of a small monthly subscription charge. Subscribers may select any member of the Dallas County Medical Society, who has registered with the plan, to render services. The plan purports to preserve the present relationship between the physician and his patient except in the manner of making payment for the physician's services. The principle of free choice of physician is maintained and the relationship is the same as in private practice in which physcians have an ethical and legal responsibility to their patients.

Advisory Board to Texas Branch of the American Legion.—The following physicians have been named on the Texas Department Medical Advisory Board of the American Legion by Henry Love, Fort Worth, department commander, reports the Mineral Wells *Index*: Drs. E. F. Yeager, Mineral Wells; V. L. Smith, Dallas; James Makin, Port Arthur; S. W. Bohls, Austin; M. W. Sherwood, Temple. The purpose of the board is to develop a program and supervise plans for returning veterans of the present war and to work with the National Medical Advisory Committee of the Legion. They will also supervise the program to be carried out through the medical advisor of each post in the State.

New Indigent Sick Program for Tom Green County. The commissioners of Tom Green County recently decided to do without the services of a county health physician, at least for the time being, and indigent sick will be cared for on a "fee for service" basis, states the San Angelo *Standard Times*. Dr. V. E. Schulze, chairman of the San Angelo Board of Health, expresses the opinion that the "fee for service" basis may work very well, the only possible difficulty being in payment of physicians serving as witnesses in insanity hearings. Under the "fee for service" system, the county health nurse, when she finds some indigent person in need of medical aid, calls a physician, preferably the patient's choice, and he is paid the regular fee of three dollars. Visits to the jail and county poor farm are handled in the same way.

The Southern Medical and Hospital Service "Doctors' Plan," under which more than forty thousand men, women and children are insured for hospital and medical costs, has paid out in benefits more than one-hundred thousand dollars without a single contested case or dispute, the company announces, states the Houston *Press*. The plan provides equal coverage for all members of the family and choice of any registered hospital. Free choice of physician is permitted. The plan provides thirty days hospitalization for each person for each policy year, providing equal benefits for men, women and children. All benefits are payable within ten days after the office of service receives the diagnosis of the attending physician and the statement from hospital used. Further information may be obtained from the district office located in the Citizens' National Bank Building, Houston.

Million Book Medical Library Goal.—Seven major medical organizations of Dallas will give a joint benefit dinner at the Hotel Adolphus May 18, as the first step toward establishing a million volume library at Southwestern Medical College, states the Dallas *News*. It is pointed out that the goal, if realized, will be several years from now since only six medical libraries of colleges in America have a million volumes. The Southwestern Medical College library now has about five thousand volumes. The seven groups which will participate in giving the banquet are: Dallas County Medical Society, Dallas County Dental Society, Medical Service Society, Dallas County Pharmaceutical Association, Dallas Hospital Council, District Four Graduate Nurses Association, and Dallas County Dental Assistants.

The cost of each plate to the banquet will be five dollars, and money in excess of the banquet expense will go to the library fund. Arrangements are being made to provide complimentary tickets to the wives of Dallas physicians now in the armed services.

Houston Infant Mortality Rate is at a new record low, reports William H. Albans, city registrar of vital statistics, in the Houston *Press*. The rate has dropped steadily over a tweny-year period to a point of 39.93 per one thousand live births in 1944. In 1925, twenty years ago, the rate was 99.13 for one thousand live births. From that peak year, there was almost a steady year to year decline, with an almost spectacular drop in 1944 as compared to 1943. The decrease has occurred in both white and Negro children. The rate dropped from 93.35 per one thousand live births, to 34.77 for white infants, and from 116.28 to 61.58 for Negro children. Dr. Austin E. Hill, city health officer, credits several factors as responsible for the decrease in infant mortality, but in particular the fact that more babies are now being born in hospitals, more babies are being born with physicians in attendance, and better prenatal care and instructions are being given expectant mothers.

The Texas Hospital Association executive group concluded a two-day meeting, April 5 and 6, at Galveston, with a general session at the Hotel Galvez. At this meeting Lawrence Payne, administrator of Baylor Hospital, and incoming president of the Association, conducted a general round-table discussion on problems with which hospitals are currently confronted. Other speakers included: Phil R. Overton, Austin, general counsel, who discussed legislative affairs; Miss Eva M. Wallace, Fort Worth, retiring president, who discussed the "Nurse Draft Program"; W. R. McBee, Dallas, executive director of Group Hospital Service, Inc., whose subject was "Increased Facilities for Prepaid Health Care"; Madelyne Sturdavant, Dallas, executive secretary, who spoke on "Increased Activities of the Texas Hospital Association"; and Dr. C. D. Leake, dean and executive vice-president, University of Texas School of Medicine, Galveston. Dr. Leake's subject was "Pepper and Texas," under which title he discussed the recent report of Senator Claude Pepper's subcommittee on wartime health and education to the committee on education and labor. He presented a blueprint of the kind of medicine which will be offered people of the United States in the near future, as recommended by Senator Pepper's committee, with the support of the American Medical Association. The report emphasizes preventive medicine, general sanitation, and postgraduate training for physicians. It appears to be devised especially for the needs of Texas, according to Dr. Leake. He asserted that Texas has anticipated the report in its own child health program in the pediatrics department of the University of Texas School of Medicine, and in the mental hygiene work of the University through the Hogg Foundation. Dr. Leake averred that emphasis must be placed on more satisfactory distribution of medical service, which can possibly be accomplished by working through medical centers where groups of medical specialists work in coöperation with a central base hospital fed by scattered health units. Dr.

Leake pointed out that the report emphasized the importance of prepayment plans and voluntary health insurance. He recommended careful study of the Pepper report and the consideration of it in the preparation of a future health program for Texas.

At the conclusion of the meeting, Miss Eva Wallace, retiring president, spoke briefly with regard to a plan on which the Association is working in connection with government aid in the post-war expansion program.

The annual Association convention was cancelled this year because of the war and officers were elected by mail, with the following results: Lawrence R. Payne, Administrator of Baylor Hospital, Dallas, president; Tol Terrell, administrator of Harris Memorial Methodist Hospital, Fort Worth, president-elect; Harold Prather, Sherman, treasurer; Mrs. Alfreda P. Hassell, San Antonio, first vice-president; Mrs. Ed R. Sizer, Corpus Christi, second vice-president; Wayne J. Holmes, Wichita Falls, third vice-president; Sister Mary Vincent, Waco; C. J. Hollingsworth, Lubbock; Russell C. Nye, Dallas; Thomas Head, San Angelo; J. W. Torbett, Marlin, and Eva M. Wallace, Fort Worth, all trustees.

The Texas Surgical Society held its spring semi-annual meeting at the Hotel Texas, Fort Worth, April 2 and 3, with fifty-four members present.

The following scientific program was carried out:

The Treatment of Penetrating Wounds of the Brain—C. C. Nash, Dallas.

An Interesting Breast Case—Jack Furman, Fort Worth.

The Surgical Treatment of Hypertension—S. R. Snodgrass, Galveston.

Amputation in the Upper Third of the Leg—G. W. N. Eggers, Galveston.

Symposium on Reconstructive Surgery—Surgical Staff of Wakeman General and Convalescent Hospital, Camp Atterbury, Indiana.

(a) Rehabilitation of the Soldier with Spinal Cord Injury—Lt. Col. Caleb S. Stone.
(b) Repair of Peripheral Nerves: Surgical Approach and Adequate Removal of Neuromata—Captain Emil Seletz.
(c) Late Care of Penetrating Wounds of Skull and Brain—Major Augustus McCraven.
(d) Problems in Orthopedic Surgery—Major Sam Banks.
(e) Indications for Flaps and Grafts in the Treatment of Cicatrices of the Extremities—Captain Nathaniel Soderberg.
(f) Treatment of Contour Defects About the Face—Major Truman G. Blocker, Jr.

Effective Neurosurgical Procedures for Control of Pain—Albert D'Errico, Dallas.

The Evaluation of Succinylsulfathiazole and Phthalylsulfathiazole as Adjuvants in Surgery of the Colon—Edgar J. Poth, Galveston.

Intestinal Obstruction—Charles G. Johnston, Professor of Surgery, Wayne University College of Medicine, Detroit, Michigan.

Hypertrophic Pyloric Stenosis in Infancy—Joe White, Fort Worth.

During a business session, General James Bethea, Commanding Officer, McCloskey General Hospital, Temple, was elected to honorary fellowship. Dr. Charles Bussey, Dallas; Dr. D. C. Enloe, Sherman; Dr. Herman Dustin, Houston; Dr. Laurece Wiig, San Angelo, were elected active fellows of the society.

In the evening of the first day, a dinner was held in the Alamo Room of the Hotel Texas.

The society will hold its next meeting in San Antonio in October.

The local arrangements committee consisted of: Dr. Joe White, chairman, George Enloe, Leroy Snyder and Jack Furman.

Dr. Sam Weaver of Dallas is president, and Dr. Walter G. Stuck of San Antonio, is secretary of the society.

Statewide Cancer Committees will be set up in a program initiated by the University of Texas M. D. Anderson Hospital for cancer research, Houston, advises the Galveston *News*. The long range objectives of the program is to enlist the assistance of large groups in each community to help acquaint the public with early symptoms of cancer and the necessity for early treatment. Dr. E. W. Bertner, Houston, acting director of the hospital, asserts that if people can be encouraged to present themselves for early diagnosis and treatment, many of the 8,000 or 9,000 lives lost in Texas each year from cancer will be saved. It is estimated, according to Dr. Bertner, that thirty-five to forty per cent of people who have cancer in its early stage, can be cured.

Fellowships for Physical Therapy Technicians.—The National Foundation for Infantile Paralysis announces that scholarships for training in physical therapy under the $1,267,600 program of the foundation, are available immediately for classes commencing in June and July. The scholarships offer from nine to welve months' courses in approved schools of physical therapy. They cover tuition and maintenance in accordance with the student's needs.

Basil O'Connor, president of the foundation, points out that post-war possibilities in this field are almost without limit, and that physical therapy is a field in which there is no over-crowding. The training program will be carried out with the assistance of a special committee under the chairmanship of Dr. Irvin Abell, Louisville, Kentucky, chairman of the board of regents of the American College of Surgeons. Candidates for the scholarships must have two years of college including biology and other basic sciences, or be graduates of accredited schools of nursing or physical education. Applications should be made to the National Foundation for Infantile Paralysis, 120 Broadway, New York 5, N. Y., or to the American Physiotherapy Association, 1790 Broadway, New York 19, N. Y.

University of Texas News.—Dr. A. V. Stoesser, Chief Pediatrician of the Minneapolis General Hospital, gave special lectures on infant care at the University of Texas Medical Branch, Galveston, April 4 and 5, under the auspices of the Child Health Program of the University of Texas, of which Dr. Arild Hansen is director.

Dr. Ghent Graves, Mrs. George T. Morse, and Mrs. Laura Lee Graves Steel of Houston, Texas, have given funds to the University of Texas Medical Branch, Galveston, to establish a research fellowship in internal medicine in honor of their father, Dr. Marvin Lee Graves, Emeritus Professor of Medicine in the University of Texas School of Medicine. The fellowship will be filled annually by the Department of Medicine through the appointment of a graduate in medicine who is considered most likely to maintain the professional standards and ideals of Dr. Graves. The donation was accepted by the Regents of the University on Doctor Graves' 74th birthday.

Dr. A. C. Corcoran of the Cleveland Clinic, spoke at the University of Texas Medical Branch, Galveston, on April 9 on "Renal Clearance Studies in Hypertension." Dr. Corcoran spent a few days in Galveston working with Dr. Eric Ogden of the Department of Physiology, and Dr. Raymond Gregory of the Department of Internal Medicine on problems associated with hypertension.

The University of Texas Medical Branch, Galveston, announces the establishment of a postgraduate medical training program under the direction of Dr. George Decherd, Jr., Associate Professor of Medicine. A special faculty committee will coöperate with Dr. Decherd in the development of a broad postgraduate medical training program which will embody three features: (1) short postgraduate conferences and courses on special subjects, to be held at the Medical Branch in Galveston; (2) two-day conferences to be given by members of the Medical Branch faculty in coöperation with county and district medical societies in various parts of this State, and (3) residency training for specialty board certification and specialty practice. Emphasis in resi-

dency training will be placed on preclinical laboratory work in the special fields in which the resident is interested. The preclinical laboratories of the Medical Branch will coöperate with hospitals approved for residency training in Texas in affording appropriate facilities for fundamental training in specialties. The first conference to be held under the auspices of the new postgraduate training program is being arranged by the Department of Pediatrics and the Child Health Program, under Dr. Arild Hansen, Professor of Pediatrics, for May 14 to 19. Forty physicians can be accommodated for the period.

Military Personals

Captain H. L. D. Kirkham, M. C., USNR, of Houston, was recently home on leave from the San Diego Navy Hospital, where he has received national acclaim for plastic surgery on war casualties, advises the Houston *Press*. While at home, Dr. Kirkham took a busman's holiday by performing plastic surgery in Houston hospitals.

Captain M. L. Monroe, M. C., AUS, recently headed a group of twenty-seven exchange prisoners from Germany, members of the Thirty-sixth (Texas) Division, received at McCloskey General Hospital, Temple. Captain Monroe, a battalion surgeon, was captured with several hundred of his patients, and had been a prisoner in Germany for sixteen months. Captain Monroe was in practice at Jasper prior to his entry into service.

Major F. C. Hodges, M. C., AUS, of Abilene, was recently promoted from captain, states the Abilene *Reporter-News*. Major Hodges, orthopedic surgeon, is stationed at a hospital in Southern England. He has been overseas sixteen months.

Captain H. P. Hawk, M. C., AUS, of Gainesville, is home on leave after two years of combat duty in Italy, France and Germany, informs the Greenville *Register*. Captain Hawk is attached to the Thirty-Sixth Infantry Division.

Major Hugh B. Tandy, M. C., AUS, of Abilene, is home from service in the European theater of operations, informs the Abilene *Reporter-News*. Major Tandy left the States in December, 1942, for Africa, where he served eleven months in a station hospital. He was then on detached service in Sicily for a short while, following which he was moved to Italy with his original station hospital unit, in which he was chief of medicine. He left Italy shortly after Christmas on his return home. Major Tandy served during World War I as a private.

Major Douglas Moore Bush, M. C., AUS, was recently promoted from captain, advises the Dallas *Times-Herald*. Major Bush was assistant professor of Gynecology at Baylor University College of Medicine, prior to his entry into service. Major Bush is chief of the department of obstetrics and gynecology at the AAF Convalescent Hospital, Fort George Wright, Spokane, Washington. The department averages about forty-two deliveries a month.

Dr. John Pangman, El Paso plastic surgeon, was recently commissioned a Lieutenant-Commander, and ordered to report to the Naval Hospital in Oakland, California, March 26.

Dr. John G. Little, of Cleburne, was given the commission of Lieutenant-Commander, M. C., USNR, on April 18, and has been ordered to report for active duty on May 7, 1945, at the Naval Receiving Hospital, San Francisco.

Lieutenant-Colonel Emil Patrick Reed, M. C., AUS, of Brownsville, was recently promoted from the rank of Major, reports the Office of the Surgeon General.

Dr. W. T. Youens, of the Southern Pacific Railway hospital, Houston, reported for active duty with the Army of the United States, April 1, 1945.

Captain Willis G. Youens, Jr., was recently promoted from First Lieutenant, informs the Office of the Surgeon General. Captain Youens graduated from the University of Texas School of Medicine, Galveston, in 1942, and after an internship at Kansas City General Hospital, entered the Army in February, 1944. He is now stationed at a general hospital in England.

Dr. T. J. Scull of San Antonio, was recently tendered the commission of Lieutenant (jg), in the Medical Corps of the United States Naval Reserve, and was ordered to active duty May 7.

Personals

Dr. Hatch Winfield Cummings of Hearne, retired recently after more than a half century of service to Hearne and surrounding territory, states the Hearne *Democrat*. As a small-town and country physician Dr. Cummings attained the highest honors that could be accorded him by Texas medicine during his professional career. He was one of the organizers of the Brazos Valley Medical Society in 1896, and was its first president. He was a member of the first Board of Councilors of the State Medical Association, after its reorganization in 1903. He served the State Medical Association as president in 1908, and he was a member of the State Board of Health from 1909 to 1911. He has served the State as a member of the Board of Medical Examiners. For many years he was chairman of the Legislative Committee of the State Medical Association, and was perennially a member of its House of Delegates. He has served Texas medicine well in addition to outstanding services as a family physician to the people of Hearne and its surrounding territory.

Dr. Preston Ershell Harrison, member of the faculty of the Baylor College of Medicine, now doing graduate work at the University of Chicago, was recently elected to Sigma Xi, national honorary fraternity for the promotion of scientific research, reports the Houston *Press*.

Dr. Minnie L. Maffett, of Dallas, has been given the designation of "America's No. 1 Professional Woman," states the Fort Worth *Star-Telegram*. Dr. Maffett, surgeon and gynecologist, has been national president of the Business and Professional Women's Club since 1939. Dr. Maffett is also known as the "flying doctor" for her interest in air travel and the frequency with which she is an air passenger. She has flown over every State in the Union.

Dr. C. G. Swift of Cameron, has been taking postgraduate work in New Orleans, informs the Cameron *Enterprise*.

Dr. Donald Slaughter, dean of students, Southwestern Medical College, Dallas, recently represented the Dallas Medical Center at a premedical educational conference, at Union College, Schenectady, N. Y., advises the Dallas *News*. Dr. Slaughter later represented Southwestern Medical College at an industrial medical meeting at Columbia University.

Dr. Grady Deaton, Houston, was appointed full-time director of the Harris County Health Unit, April 1, states the Houston *Press*. Dr. Deaton had been part-time director of the unit since the resignation of Dr. A. M. Clarkson in January.

SOCIETY NEWS

Bell County Society

February 7, 1945

(Reported by O. B. Gober, Secretary)

Bell County Medical Society met February 7 at the Kyle Hotel, Temple, with seventeen members and one visitor present. R. R. Curtis, president, presided.

President Curtis appointed a committee composed of J. W. Pittman, L. R. Talley, and R. K. Harlan to compose resolutions on the death of Dr. A. E. Ballard.

Charles Phillips, chairman of the public health committee, announced that J. Frank Clark had been

appointed to succeed Dr. Ballard as director of the Central Texas Health Unit. L. D. Stuart is in charge of the Venereal Disease Clinic in Temple.

Communications from the Legislative Committee of the State Association were read, regarding H. B. 29 and S. B. 57.

A. Ford Wolf, chairman of the public relations committee, read copies of letters he had addressed to Representative Sam Sellers and Representative W. W. Roark.

G. V. Brindley, Councilor of the Twelfth District, urged that more scientific papers be presented at society meetings to stimulate interest and better attendance.

El Paso County Society

March 13, 1945

(Reported by John D. Martin, Secretary)

Symposium on Thyroid Diseases:
(1) Surgical Aspects—L. E. Wilcox, El Paso.
(2) Medical Treatment of Thyrotoxicosis—J. E. Morrison, El Paso.
(3) Radiation Therapy in Thyroid Diseases—J. R. Fuchlow, El Paso.

El Paso County Medical Society met March 13, at the Hotel Cortez, with Sam R. King, president, presiding.

The symposium on thyroid diseases as given above was presented. The symposium was discussed by Felix B. Miller, L. O. Dutton, George Turner, and Charles Rennick.

Other Proceedings.—A letter was read from the chairman of the local Red Cross war fund, requesting a donation from the society in addition to donations from individual members. The request was referred to the executive committee for recommendations.

Letters regarding legislation pending in the State Legislature were read and discussed.

Felix P. Miller gave a report regarding correspondence he had had with Representatives Isaacks, Bridgers, and Kirby, and with State Senator H. L. Winfield. Dr. Miller stated that the latest advices he had were that the Attorney General had declared the chiropractic bills illegal. He further stated that in his opinion H. B. 314 would be declared unconstitutional if it were considered by the Attorney General. The constant efforts of irregulars to secure licensure will prove successful if those interested in the public health are not constantly on guard. Dr. Miller introduced a resolution expressing the opposition of the El Paso County Medical Society to the passage of H. B. 314, the hospital tax exemption bill; H. B. 29, H. B. 34 and S. B. 57, the chiropractic bills; and H. B. 82 and H. B. 97, the naturopathic bills, as ill-advised and inimical to the public health. The resolutions provided that a copy be sent to each representative of El Paso County, to the State Senator from the district, and to the officers of the State Medical Association. The resolutions were unanimously adopted.

President King announced the appointment of L. O. Dutton as chairman of the cancer committee.

April 10, 1945

El Paso's School Health Program—W. B. Prothro, El Paso.

El Paso County Medical Society met April 10 in the club rooms of Hotel Cortez with Sam R. King, president, presiding. Members of the El Paso school board were guests of the society to hear the paper of Dr. B. W. Prothro, as given above, and joined in the general discussion of the paper which followed its reading.

President King announced that the executive committee recommended that a donation from the treasury of the society to the Red Cross was not in order, since the society was a non-profit organization and the members made individual donations to the Red Cross.

Letters from Representatives Isaacks, Bridgers and Kirby, and from Senator Winfield were read, in which general opposition to H. B. 314 was expressed.

E. C. Bernel and F. G. Vargas were elected to membership on application, and P. H. Reed was accepted by transfer from the McCracken County Medical Society of Kentucky.

An invitation to members to attend the Second National Congress on Cancer at Havana, Cuba, May 7 to 12, was read.

Gray-Wheeler Counties Society

March 15, 1945

Clinical Cases: (a) Abscess of the Conjunctiva—C. E. High, Pampa; Glioma—J. J. Crume, Amarillo.
Low Back Pain in Relation to Industrial Insurance—C. H. Ashby, Pampa.
Diagnosis of Some Conditions Causing Lower Back and Sciatic Pains—W. O. Ott, Fort Worth.

Gray-Wheeler Counties Medical Society met March 15 in the private dining room of the Hillson Coffee Shop, Pampa. Following a T-bone steak dinner with all the trimmings, the scientific program as given above was presented with fourteen members and one visitor present.

The case of conjuctival abscess reported by C. E. High occurred in a one-month-old baby. Following rupture of the abscess, recovery was complete.

J. J. Crume reported three cases of glioma in children. Dr. Crume raised the question as to whether glioma is a malignant tumor from the beginning or whether the condition becomes malignant after its beginning.

The papers of Drs. Ashby and Ott were instructive and interesting, and were followed by general, extended discussion. Dr. Ott was given a vote of thanks for coming from Fort Worth to present his paper.

Other Proceedings.—A resolution adopted by Tarrant County Medical Society opposing H. B. 314, the hospital tax exemption bill, was read, and on motion was unanimously adopted by Gray-Wheeler Counties Society.

It was voted to have cards printed expressing opposition to the bill, for distribution to all who would be agreeable to sending them to their legislators.

The Society also went on record as opposing the two-dollar annual registration fee, and to urge the State Medical Association Legislative Committee to start proceedings for the repeal of the annual registration law.

Hidalgo-Starr Counties Society

April 12, 1945

(Reported by Ottis Walker, Secretary)

Brief Biography of the late President Roosevelt—H. E. Whigham, McAllen.
An Unusual Surgical Case—Ottis Walker, Mission.
Federal Control of Medical Care—H. E. Whigham, McAllen.

Hidalgo-Starr Counties Medical Society met April 12 at the Odd Fellows' Hall, Donna, with twelve members present. Preceding the scientific program indicated above, members of the society had dinner with members of the auxiliary.

A brief biography of President Roosevelt which was prepared by H. E. Whigham, was presented by President A. S. Osborn, and tribute was paid by the Society to the late president.

The paper on federal control of medical care presented by H. E. Whigham, covered both sides of the question, and the subject was freely discussed by the members present.

Hunt-Rockwall-Rains Counties Society

February 13, 1945

(Reported by Harriet Rogers, Secretary)

Clinical Cases: (a) Meningitis Responding to Sulfonamide and Penicillin—W. C. Morrow, Greenville; (b) Sulfonamide and Penicillin Therapy in Pneumonia; Penicillin in Appendical Abscess—W. B. Reeves, Greenville.

Diseases of the Cervix—W. F. Guerriero, Professor of Obstetrics and Gynecology, Southwestern Medical College, Dallas.

Hunt-Rockwall-Rains Counties Medical Society met February 13 with thirteen members and visitors present. Joe Becton, president, presided and the scientific program as given above was carried out.

W. C. Morrow reported a case of meningitis in an adult which responded to sulfonamide and penicillin therapy.

W. B. Reeves reported a case of pneumonia in which there was slight response to sulfonamide therapy in forty-eight hours and which finally required penicillin in large amounts. Dr. Reeves also reported the use of penicillin in a case of abscess of the appendix in which operation was done.

W. F. Guerriero read a paper on diseases of the cervix. The pathologic changes encountered in different types of cervicitis were reviewed. They were classified as: (1) simple erosions, in which the squamous epithelium is denuded; (2) erosions with granulation tissue, in which there is a downgrowth of columnar epithelium following trauma, irritating contraceptives or vaginal discharge; (3) cervicitis with infection of the racemose glands following lacerations from childbirth, which encourages the overgrowth of granulations which become secondarily infected by pathological organisms in the vagina; and (4) diseases of the cervix. The last named classification is further divided into minor and major disease conditions. Minor disease conditions of the cervix include fibroids and polyps. The major disease conditions of the cervix include (1) tuberculosis, which is an occasional cause of blood-tinged vaginal discharge or bleeding; (2) granuloma inguinale, in which there is a yellow discharge and bleeding; syphilis, which is accompanied by a dirty, ulcerated erosion, which becomes secondarily infected, and in which the diagnosis is made by darkfield examination; (4) carcinoma, which is the most prevalent type of malignancy in women. Carcinoma should be suspected in diseases of the cervix at any age in order to detect cancer in the curable stage. All erosions should be treated with silver nitrate or cautery. Biopsies should be done in cases of cervicitis, following which the cervix should be coned, coagulated, or frozen, to eradicate completely the infected area.

W. C. Morrow announced that the regional public health laboratory was now open and functioning, so that tests formerly made by the state laboratory in Austin would now be done in the regional laboratory. J. R. Risinger, director of the laboratory, conducted members on a tour of inspection. The laboratory is located in rooms adjacent to the court rooms in the municipal building.

Ralph Jenks reported successful work in the typhus fever-rat eradication campaign.

The society voted unanimously to telegraph the senator and representatives to actively oppose chiropractic bills pending in the Legislature.

Consideration was given to the matter of donation to the County Medical Society Library Endowment Fund. Following a report by the treasurer, it was decided that members should donate individually instead of as a society, since local dues were low. It was reported that twenty members had paid annual dues for 1945.

Jefferson County Society

March 12, 1945

(Reported by L. R. Byrd, Jr., Secretary)

Some Aspects of Diabetes Mellitus—James A. Greene, Professor of Medicine, Baylor University College of Medicine, Houston.

Jefferson County Medical Society met March 1 at St. Therese Hospital, Beaumont, with Stewart Weir, president, presiding.

The scientific program as given above was carried out. The paper of Dr. Greene was discussed by Taylor Walker, H. B. Eisenstadt, Stewart T. Weir and J. C. Crager.

Honorable J. M. Combs, United States Representative from the second district of Texas, was then presented and spoke on government controlled medicine and legislation pending in Congress, which, if enacted, would socialize medicine. Mr. Combs prefaced his remarks with the statement that he was opposed to regimentation, in any manner, of the profession of medicine, and to any system which would deny the right of an individual to select whatever physician he desired. Mr. Combs discussed briefly a bill in Congress directed toward accident prevention and elimination of health hazards in industry, calling for the establishment of a department in the Department of Labor of the federal and state governments to carry out the proposals of the bill. Mr. Combs raised the question as to whether or not this legislation would be a step toward regimentation of medical practice. He also discussed briefly the Wagner-Murray-Dingell Bill, indicating his opposition to this measure. He then opened the subject for round-table discussion. The subject was discussed by W. D. Brown, Irma M. McFaddin, P. B. Greenberg, T. S. Barkley, J. A. Hart, J. N. Gardner, L. C. Powell, and H. B. Eisenstadt. Mr. Combs, in closing, pointed out the great need for the education of the general public regarding the true meaning of government medicine, and asserted that the greatest opportunity for such education lies in the hands of the medical profession itself in its daily contact with patients. He suggested the use of short, simple, printed discussions of the issue.

R. T. Lombardo was elected to membership.

Resolutions adopted by the Tarrant County Medical Society in opposition to H. B. 314 were read. On motion of E. D. Mills, the matter was referred to the legislative committee with the direction that the representative and senator of Jefferson County be notified of the objection of the society to this bill.

April 9, 1945

The Evaluation of Sequelae in the Head Injury Patient—John L. Otto, Galveston.

Survey of the Status of Sympathectomy in the Treatment of Hypertension and a Report on the Smithwick Type Treatment in Three Recent Cases—S. R. Snodgrass, Galveston.

Complicated Injuries of the Leg and Ankle—G. W. N. Eggers, Galveston.

Jefferson County Medical Society met April 9, at St. Mary's Hospital, Port Arthur. A scientific program was presented by members of the faculty of the University of Texas School of Medicine, Galveston, as given above. The paper of J. L. Otto on the evaluation of sequelae in cases of head injury was discussed by J. A. Hart, J. B. Woodall and E. C. Ferguson.

The paper of S. R. Snodgrass was discussed by J. C. Crager, H. B. Eisenstadt, Taylor Walker and J. A. Hart.

Resolutions of sympathy, prepared by a committee composed of E. W. Vaughan, A. R. Autrey and J. M. White, were adopted on the death of Dr. W. E. Crumpler of Port Arthur.

Tarrant County Society

March 6, 1945

(Reported by X. R. Hyde, Secretary)

Congenital Hypertrophic Pyloric Stenosis in Infancy—R. J. White, Fort Worth.

Development of Aviation Medicine—T. J. Cross, Fort Worth.

X-rays of the Month—S. Jagoda, Fort Worth.

Tarrant County Medical Society met March 6 in the Medical Arts Auditorium, Fort Worth, with forty-four members and four visitors present. The scientific program as given above was carried out. The presentation of Dr. White was discussed by E. G. Schwarz, Jack Furman and T. H. Thomason.

A. J. McDonald was elected to membership on application.

Secretary Hyde announced that the board of trustees of the society had voted to assess each member

one dollar to take care of dues for military members.

Secretary Hyde read a letter from the insurance department of Consolidated Vultee Aircraft Corporation, asking coöperation in the matter of completing reports. The request was referred to the industrial relations committee of the society.

Impromptu talks were given by Jack Furman, M. H. Crabb and John J. Andujar, regarding legislation pending in the State Legislature, and suggestions were made concerning improvement in the legislative work of the State Medical Association.

A resolution was introduced by John J. Andujar, protesting the attitude of the Legislative Committee of the State Medical Association regarding H. B. 314, and urging that officials of the State Medical Association and its Legislative Committee oppose this bill with vigor, utilizing to the fullest the financial, legal, moral and influential resources of the Association. The resolution provided that a copy be sent to each official of the State Medical Association, to each member of the Legislative Committee, and to secretaries of component county medical societies of the Association. The resolution was adopted.

The following resolutions expressing opposition to H. B. 314, the so-called hospital exemption bill, were then presented by John J. Andujar and adopted:

"*Whereas*, A law has been proposed in the Texas House of Representatives by Representative Marvin B. Simpson, Jr., of Fort Worth, purporting to punish by taxation all non-profit hospitals which reserve the elementary right to select their medical staffs and supervise their work and ethics, and

Whereas, The said law is based on several *erroneous* premises regarding the license of the Texas Board of Medical Examiners, to-wit:

"1. That *all* the said licentiates of the Texas Board of Medical Examiners have passed the written examinations of that Board. (They have not all done so, for many are licensed by reciprocity with even less strict States, many others hold licenses on the 'grandfather' clause and could not meet even the minimal educational requirements, let alone pass these written examinations.)

"2. That the said written examinations are adequate protection for the public, insuring a high quality of practitioner in Texas. (They are not—passing of these examinations by cultists and graduates of unrecognized schools is easily explained since under the Constitution of Texas no questions may be asked on any phase of treatment of the sick nor on the study of drugs. Such common everyday topics as blood plasma, sulfanilamide, penicillin, etc., cannot be mentioned in these examinations.)

"3. That the medical profession considers these written examinations adequate proof of competency. (They do not—no written examination can be very closely related to the type of practical ability necessary in surgery, obstetrics and medicine.)

"4. That the educational requirements of the Board are adequate. (They are not—nearly all reputable physicians take far more college work than required. And the said Board *does not even require an internship*, which all qualified physicians voluntarily serve. In actuality (legally) a lad of fifteen months premedical training, thirty-three months medical school and no internship can take the Board examination and immediately start doing major surgery just four calendar years after high school graduation—only the hospital can stop him from this type of murder.)

"5. That, once licensed, the physicians are entirely competent to engage in "unlimited practice" (quoting the proposed law) of all specialties without further limitation or supervision. (They are not—all physicians of honor claiming to do unlimited work in a given specialty voluntarily take many years of graduate training and postgraduate courses in that specialty after serving the usual rotating internship. Those electing to do general practice strive constantly to perfect their general skills but voluntarily refuse to do brain surgery, mastoidectomies, internal podalic deliveries, etc., voluntarily calling for their specialist colleagues in the interest of the patient.)

"6. That once licensed, the physicians remain entirely competent for life. (They do not—many become prey of narcotic, alcohol and other drug habits, or engage in abortions or exploitation of the gullible or deteriorate mentally. It is difficult enough for the physicians themselves to exercise their legitimate function of policing such characters. Any experienced district attorney will proclaim the fact that from the legal standpoint it is even more difficult for the state to police them—and in fact it is next to impossible), and

"*Whereas*, The said law is based on several *erroneous* premises regarding the functions, rights and responsibilities of hospitals, to-wit:

"1. That hospitals are operated largely for the benefit of their medical staff members. (They are not—all reputable hospitals are operated for the benefit of patients first and the general good of the community and state second. Any physician who violates either of these basic provisions is simply not reappointed at the annual appointment time by the hospital's governing board.)

"2. That the hospital should have no control over its physician members or their action. (They should have—if the physician cannot be required to keep up his case records, his use of diagnostic and therapeutic aids available in the hospital, his teaching duties to nurses, interns and technicians and his responsibilities to his medical staff colleagues and patients, the hospital deteriorates rapidly to the low level of "hotels for the sick" rather than bulwarks of health, healing, teaching and research.)

"3. That hospitals should not have the right to choose their staffs. (This is untrue since even *tax supported* city, county and state hospitals have this right, and would have even under this bill. The supreme courts of Texas, Florida, South Carolina, and a great many other states as well as the Supreme Court of the United States—on several occasions—have ruled that hospital governing boards not only have such a right but it is their duty to select their staff members by any criterion they choose. In the most recent Texas case, osteopath Hayman at Galveston sought a court order, as a taxpayer, and licentiate of the State Board of Medical Examiners and under "no preference" clause of the Constitution to force the city and state supported John Sealy Hospital to admit him to practice. In denying relief to the osteopath the court said (Hayman vs. City of Galveston et al. 47 A. Ct. 363,273 U. S. 414) 'in the management of a hospital, quite apart from its educational purposes, some choice in methods of treatment would seem inevitable, and that a selection . . . in the exercise of the judgment of the governing board was not a denial of the equal protection of the law.')

"4. That hospitals exercise arbitrary rights in the selection of the medical staff alone. (They do not—private duty nurses paid directly by the patient are just as carefully selected, regardless of state license. Why does not this bill attempt to regulate such nurses and similar technical licensees? Do proponents of the bill intend later to add chiropractors, naturopaths, sanopaths and other healers to the hospital medical staff as each of these cults is legalized by their minority pressure groups?)

"5. That hospitals exist only to treat the sick. (They do not—the thousands of graduate and cadet nurses, interns, residents in specialty, medical technologists, x-ray technicians, occupational and physical therapists trained in Texas bear mute witness

to these additional functions as well as the preventive programs and research projects of the modern hospital. Telegraphic advice has been received from the Council on Medical Education and Hospitals of the American Medical Association that approval will be revoked with accompanying collapse of all these war vital programs, if hospitals throw wide their facilities without limit or supervision to all licentiates.)

"6. That abdication of the governing board's authority to the provisions of this bill can be stopped here. (It probably cannot—once the precedent has been set that governing boards no longer can select their medical staff members, the gates are open. For example, the said boards deny negro licentiates of the Texas Board of Medical Examiners the privilege of hospital staff membership. With recent legislative trends, it is only a matter of time until they will demand their 'rights' as licentiates. The same will inevitably be true of sanopaths, naturopaths, elective healers, quacks and near quacks as their pressure groups succeed in their attempts at legalization. Admitting negro physicians to hospitals for whites, or near quacks to medical hospitals would not be in the public interest in Texas, no matter how legal.)

"7. That hospitals are tax exempt because they do charity. (They are not, any more than are churches or colleges or other scientific institutions doing no charity. They are tax exempt because they are non-profit associations, necessary to the public good. Actually, although not required to do so, they do a large volume of charity work. During the depression one Fort Worth hospital alone continuously maintained nineteen charity beds mostly for WPA referred, desperately sick, patients ineligible for City-County hospitalization by reason of residence. This amounted to over $40,000 annually and is still being continued. The organized medical staffs of these hospitals contributed additional countless thousands of dollars worth of free medical care.)

"8. That punitive taxes will come from the hospital's reserves. (They will not—few Texas hospitals are endowed or have any reserves so that obviously the sick citizen will pay roughly $1.00 more each day for his bed to pay this tax. Thus the citizens will pay the tax and lose the charity services being contributed gratis by the hospitals and their doctors. This will force the citizen, sick or well, to pay additional increased taxes to support the increased load at city, county and state hospitals.)

"9. That better scientific service to the public will result. (It will not—such expensive instruments as iron lungs, hypertherms, spectroscopes, etc., never repay their original financial outlay. Not being taxed, however, hospitals have had to figure only on the original expense instead of including a perpetual tax during the life of the instrument. Will hospitals be anxious to install unprofitable plasma banks, resuscitators, iron lungs, etc., and then pay tax rent on them each year?)

"10. That limiting the medical staff of the hospital to members of the county medical society makes it a "closed staff" hospital. (It does not—a truly open staff hospital then would only be that institution admitting physicans, osteopaths, Christian Science practitioners and healers—they are all now legal—chiropractors, naturopaths—they have been and may again be legal—and in fact all healers. The phrase "closed staff" as universally used throughout the English speaking world means that the staff is a very markedly limited group of highly picked men with far more credentials than just county medical membership. All four tax exempt Fort Worth hospitals have medical staffs in excess of 150 members not counting the several dozen in the armed forces); and

Whereas, The said laws are based on several *erroneous* general premises, to-wit:

"1. That principles of liberty are somehow involved in the present system of selection of medical staff members from county medical society rolls. (They are not—the fundamental difference between liberty and license still prevails. If theoretical freedom of opportunity should exist without any regard to the common good, then why have any state boards of examiners? If these exist to protect the public, but being politically appointed and politically controlled are far from perfect, why not encourage and assist hospitals and groups striving to raise standards and provide nearer perfect service to the public?)

"2. That democracy is somehow involved. (It is not—if osteopaths and unethical physicians are barred from certain reputable institutions they are free under the law to go to other hospitals not barring them or start their own tax exempt hospitals. Osteopaths have under the common law, and should have, a perfect right to bar physicians from their own osteopathic tax exempt hospitals.)

"3. That county medical societies are monopolistic and exclusivistic. (They are not. In the past seven years only one applicant has been refused membership by the Tarrant County Medical Society. Of the fewer than three hundred licentiates of the State Board of Medical Examiners residing in Tarrant County—including about 275 reputable physicians, twelve osteopaths and a smaller number of negro doctors and unethical physicians—over 270 are members of the said County Medical Society.)

"4. That tax exempt institutions are not entitled to reasonable autonomy, consistent with the public interest. (They are—this measure sets a precedent for invasion of the autonomy of churches, parochial schools, fraternal and benevolent societies and a host of other tax exempt institutions operated for the public good. These institutions are the very essence of our democratic system; they can only be replaced with tax supported similar institutions, hastening the arrival of the socialist state.)

"5. That it will not impair the general esteem in which Texas physicians and hospitals are regarded. (It will certainly do so. Aside from withdrawal of recognition by all national licensing and accrediting bodies it will lower the intelligent public's esteem for our scientists and their institutions. Too many Texans are still going to Minnesota, Maryland, and distant medical centers—incidentally to tightly closed staff hospitals. The distance is just as great in reverse and all loyal citizens of Texas should strive to build our facilities for the care of the sick to the point where citizens of our sister states will come here to be cured!); and

Whereas, In summary:

"1. The proposed bill is based on numerous false premises and discriminates in favor of tax supported institutions, and

"2. It will subject war weary hospitals, physicians and governing boards to endless legal harrassment and litigation at a time when all are contributing so magnificently to the war effort, and

"3. It would seriously hamper the supply of trained nurses, technicians, interns and specialists so necessary in war *and* peace, and

"4. It would vitiate the scientific esteem in which Texas hospitals are nationally regarded, and

"5. It would redound to the financial, physical and scientific damage of the sick citizens of Texas; therefore be it

"*Resolved* by the Tarrant County Medical Society, in ordinary session assembled this 6th day of March, 1945, that

"1. This Society hereby records its strenuous opposition to adoption of the proposed law, and

"2. The said Society calls upon Tarrant County's Representatives and Senator to oppose this ill advised and damaging measure by every means at their command, and

"3. That copies of this resolution be sent to each of the Representatives and Senator, to the officials of the State Medical Association of Texas and to the newspapers of Tarrant County."

R. C. Baker gave a report on the Child's Psychiatric Clinic, sponsored by the Council of Social Agencies.

Frank Schoonover announced a community meeting on mental hygiene at the Hotel Texas, March 20, and urged members to attend.

April 3, 1945

Essentials of Electroencephalography—Wm. R. Rosanoff, Senior Surgeon, U. S. Public Health Service.
Gastroscopy as a Diagnostic Aid—S. E. Stout, Fort Worth.
X-rays of the Month—Tom B. Bond, Fort Worth.

Tarrant County Medical Society met April 3 in the Medical Arts Auditorium, Fort Worth, with forty-one members and eight visitors present. The scientific program as given above was carried out. The paper of Dr. Rosanoff was discussed by H. O. Deaton, G. A. Kempf and S. H. Epstein.

The paper of Dr. Stout was discussed by Captain Elliot E. Foltz, Fort Worth Army Air Field.

Tribute was paid to the memory of Dr. John M. Furman, Fort Worth, who died March 21, 1945.

L. H. Reeves, a member of the Legislative Committee, State Medical Association, reviewed the work of the Legislative Committee for the past several years.

Secretary Hyde read resolutions offered by J. F. McVeigh, eulogizing the services rendered by Dr. Reeves in the practice of medicine in Tarrant County for many years, his untiring efforts in connection with the county society and the State Medical Association, both of which he had served as president. The resolutions expressed confidence of members of the society in the integrity and honesty of Dr. Reeves, and provided that a copy should be sent to the State Medical Association. On motion, the resolutions were adopted.

Dr. Reeves expressed his appreciation, but stated that he felt that members of the Executive Council of the Association and Legislative Committee should likewise be commended. John J. Andujar so moved, and the motion carried.

John J. Andujar then gave a report of a called meeting of the Executive Council of the State Medical Association at Austin, regarding pending legislation in the State Legislature, which he had attended as an official representative of the society. At the conclusion of the report of the transactions of that meeting, Dr. Andujar expressed certain views based on his experience, as to what is needed to correct unsatisfactory legislative conditions in Texas as they pertain to medicine. The following are excerpts from his statement:

"Texas medicine must sponsor realistic legislation aimed at divorcing the shotgun wedding of osteopaths and physicians in this State. A permanent, powerful, basic science board, examining alike all physicians, osteopaths, chiropractors, sanopaths, naturopaths, naprapaths and what-have-you *prior* to examination by their respective boards, must be established.

"Texas medicine must develop new political legs—the legislative interest now initiated must continue its impetus to provide a far more effective voice for we are protectors of the health and of the very lives of our fellow Texans. These new legs must be our own, not the crutches of osteopaths, faith healers, etc. Political expediency produces weird situations, but never requires suicide.

"Texas medicine must strengthen its own organization. We must reconsider the tradition of a small Legislative Committee composed of revered but elderly Past Presidents whose periods of practice are nearly concluded. Does the answer lie in a large committee of 31 (one for each Senatorial district), of whom the older men would be the counselors? Or does it lie in a larger committee based on our House of Representatives districts? Whatever the plan, our Association must continue to produce dynamic, aggressive leadership, with roots deep in the same home soil from which our politicians are elected, responsive to the needs of its members and commanding their full confidence.

"Texas medicine must increase its friendly relations to acquire again the prestige it once held. Our colleagues the dentists, chiropodists, biologists, veterinarians, nurses, technologists, hospital workers, pharmacists and a host of friends are ours, locally and on a state basis, for the asking. Ministers, teachers, writers, physical educators, lawyers and an army of similar learned groups must be cultivated and educated. We have nothing to hide and a great deal to show."

An open letter to Mr. Amon G. Carter, owner and publisher of the Fort Worth *Star-Telegram*, protesting the editorial policy of that paper in misrepresenting to the public the need for admitting osteopaths to hospitals or to compel them to pay taxes, was read. It was voted that the letter be sent to Mr. Carter over the signature of the Tarrant County Medical Society.

Wichita County Society

April 10, 1945

(Reported by Harry Ledbetter, Secretary)

The Surgical Management of Ovarian Tumors—W. G. Mengert, Southwestern Medical College, Dallas.

Wichita County Medical Society met April 10 at the Woman's Forum Clubhouse, Wichita Falls, with Bailey R. Collins, president, presiding.

The scientific program as indicated above was carried out. Dr. Mengert illustrated his paper with lantern slides.

Plans were discussed for the establishment of a blood plasma bank in Wichita Falls, and a committee was appointed to study the proposed project.

Roland F. Knox and James I. Peters were elected to membership.

Eleventh District Society

April 5, 1945

(Reported by C. B. Young, Secretary)

The Eleventh District Medical Society held its Spring meeting at the Nan Travis Hospital, Jacksonville, April 5, with a good attendance from the county medical societies in the district. The following scientific program was presented.

Preventive Pediatrics—John G. Young, Dallas.
Chest Pain—Tinsley Harrison, Dean, Southwestern Medical School, Dallas.
Urological Pathology—Major Max Moulder, M. C., Chief, Urological Section, Harmon General Hospital, Longview.
Intrathoracic Parathyroid Adenoma—C. C. McDonald, Tyler.
War Injuries to the Abdomen—Major C. M. Guernsey, M. C., Chief, General Surgical Section, Harmon General Hospital, Longview.
Rheumatic Fever—Lieutenant-Colonel D. R. Sacks, M. C., Chief, Medical Service, Station Hospital, Camp Fannin.

Members of the District Medical Society were joined by the members of the Eleventh District Auxiliary for dinner at the Liberty Hotel. Dr. Tinsley Harrison, Dean, Southwestern Medical College, Dallas, was the principal speaker on this occasion. He discussed postwar medical problems and the plans of the Southwestern Medical Foundation, which called for (1) the establishment of three to six months' courses for medical officers returning to civilian life from the armed services; (2) coöperation with the

Dallas Southern Clinical Society in four scientific meetings each year; (3) the establishment of from one to three weeks' refresher courses for private practitioners; and (4) the establishment of week-end courses for practicing physicians. The plans for the week-end courses include lectures and clinics on Friday night and Saturday morning, with recreation Saturday afternoon and night, and clinic ward rounds in Dallas Hospitals on Sunday morning. Such a plan would permit busy doctors within driving distance of Dallas to leave their offices late Friday afternoon and participate in a week-end of study and recreation, and return refreshed for work the following week. This plan was enthusiastically received.

Dr. Harrison also discussed the possibility of the addition of one or more traveling professors to the staff of Southwestern Medical College, who would carry postgraduate medical education to the busy doctor in his home town.

During a business session, the following officers were elected for the ensuing year: Dr. C. B. Young, Tyler, president; Dr. N. D. Geddie, Athens, vice-president; and Dr. J. M. Travis, Jacksonville, secretary.

The society will hold its fall meeting in Tyler, in October.

AUXILIARY NOTES

Officers of the Woman's Auxiliary to the State Medical Association of Texas: President, Mrs. S. E. Thompson, Kerrville; President-Elect, Mrs. C. B. Alexander, San Antonio; First Vice-President, Mrs. Ramsey Moore, Dallas; Second Vice-President, Mrs. H. B. Allen, Brownwood; Third Vice-President, Mrs. C. C. Jowell, Cleburne; Fourth Vice-President, Mrs. Paul H. Powers, Waco; Recording Secretary, Mrs. Mark H. Latimer, Houston; Corresponding Secretary, Mrs. H. H. Gallatin, Kerrville; Publicity Secretary, Mrs. E. L. Howard, Fort Worth; Treasurer, Mrs. F. R. Rugeley, Wharton; Parliamentarian, Mrs. E. W. Jones, Wellington.

Bowie-Miller Counties Auxiliary held its annual public relations meeting March 23, in the American Legion Home, Texarkana.

Mrs. Robert Wiseman was introduced by Mrs. William Hibbits, chairman of the public relations committee, in charge of the meeting, and gave a review of "The Emperor's Physician."

Guests were greeted by the officers of the auxiliary. Guests included representatives of other women's organizations in Texarkana.

Refreshments were served by members of the hostess committee, headed by Mrs. Hibbitts.

Ellis County Auxiliary met recently at Waxahachie. Officers for the new year were elected as follows: Mrs. S. H. Watson, president; Mrs. Lawrence Clarke, secretary; and Mrs. J. E. Jones, secretary-treasurer.

Plans were made for a picnic honoring members of the Ellis County Medical Society, to be held in the early summer.

A contribution was made to the memorial fund of the Auxiliary.

Liberty-Chambers Counties Auxiliary entertained members of the Liberty-Chambers Counties Medical Society with a buffet supper at Dayton, March 8, in the home of Dr. and Mrs. E. R. Richter. The occasion was in observance of "Doctor's Day."

Mrs. J. T. Tadlock gave an informal reading.

Lubbock-Crosby Counties Auxiliary recently donated $15.00 to the Public Relations Fund of the State Medical Association, to be used in combating socialized medicine.

McClennan County Auxiliary met March 28, at the home of Mrs. W. E. Colgin, Waco, with Mrs. Brian Aynesworth, president, presiding.

Dr. Neil M. Atkins, director of McClennan County health unit, gave a discussion of the work of the unit. Dr. Atkins pointed out that the health unit exists solely for the prevention of disease. He described the work of the three divisions, including the laboratory, sanitation and nursing, and the functions of each. Dr. Atkins was introduced by Mrs. C. F. Miller.

Hostesses for the meeting were Mrs. C. F. Miller, chairman, and Mesdames Paul H. Power, H. J. Germany, W. E. Colgin, Shelby C. Spencer, Paul C. Murphey, H. M. Anspach, I. F. Cannon, J. R. Gilliam, and Van Doren Goodall of Valley Mills.

Taylor-Jones Counties Auxiliary met March 16 in the home of Dr. and Mrs. M. V. Ramsey, Abilene, with Mrs. Ramsey, Mrs. Jack Crow, Mrs. L. J. Pickard, and Mrs. W. T. Sadler of Merkel, as hostesses.

Mrs. C. L. Prichard, president, presided.

The Auxiliary voted a donation of $7.00 to the prisoners-of-war fund, to be used especially in the Red Cross kit bag division.

A revised constitution was adopted following a report given by Mrs. Hubert Seale.

The auxiliary unanimously endorsed Mrs. L. E. Dudley, president of Abilene City Federation of Women's clubs, for the presidency of the sixth district, Texas Federation of Women's Clubs.

Mrs. M. V. Ramsey announced the award of $5.00 to Bobby Mayfield, junior high student, as winner of the essay contest on the subject, "What Physical and Mental Defects Disqualified so Many of Our Men for Army Service, and Why."

Mrs. L. F. Johnson gave a report on the work of the Army Nurses' Procurement Committee. Mrs. Johnson said approximately ten nurses had been enlisted from the district, and others were on the list to be called for physical examination.

Mrs. T. B. Bass, legislative chairman, gave a report.

Officers who will be installed in May were elected, as follows: Mrs. L. W. Hollis, Jr., president; Mrs. Erle D. Sellers, president-elect; Mrs. C. A. McFadden, first vice-president; Mrs. Scott W. Hollis, second vice-president; Mrs. Hubert Seale, third vice-president; Mrs. T. Wade Hedrick, fourth vice-president; Mrs. Jack A. Crow, recording secretary; Mrs. James P. Bridges, corresponding secretary; Mrs. James B. Latham, treasurer; and Mrs. L. F. Johnson, publicity secretary.

The Eleventh District Auxiliary met April 5, in the home of Mrs. J. M. Travis, Jacksonville, with Mrs. Robert Hodge, Councilwoman of the Eleventh District, presiding.

Reports were received from various county auxiliaries in the district.

Officers for the ensuing year were elected as follows: Mrs. L. B. Windham, Tyler, councilwoman; Mrs. Roy Page, Tyler, corresponding secretary-treasurer; Mrs. George Francis, Rusk, recording secretary; Mrs. Ralph Crawford, Rusk, publicity chairman.

Members of the district auxiliary were served luncheon at the home of Mrs. R. T. Travis, on which occasion a delightful program was provided by two members of the speech department of the Lon Morris College.—Mrs. Ralph Crawford.

BOOK NOTES

[1]**The 1944 Year Book of Industrial and Orthopedic Surgery.** Edited by Charles F. Painter, M. D., Orthopedic Surgeon to the Massachusetts Women's Hospital and Beth Israel Hospital. Cloth, 432 pages. Price, $3.00. Chicago, Illinois, The Year Book Publishers, 1945.

The orthopedic "Year Books" were started much later than the more familiar "Year Books" of surgery, medicine, and so forth, although they are rapidly becoming recognized sources of general informa-

[1]Reviewed by Walter Stuck, M. D., San Antonio, Texas.

tion. Of course much of current orthopedic literature concerns war wounds, yet this is vital information and will probably provide a basis for rapid advances in orthopedic surgery after the war. Attention is drifting away from the old subjects of joint tuberculosis, congenital deformities and scoliosis, which is probably just as well since these now constitute but a small part of the specialty.

The care of war wounds, chemotherapy, the surgery of fractures, reconstruction of arthritic patients, the treatment of osteomyelitis, poliomyelitis, tumors, lesions of the spine, and industrial surgery are some of the principal subjects covered in this latest orthopedic "Year Book." Due to restrictions of paper this book is smaller than usual, yet it gives a clear picture of the year's literature.

There are relatively few foreign articles reviewed but this is easy to understand when we realize that most European journals have suspended publication and most potential contributors are in the army. Despite the many difficulties of producing such a book in wartime, this latest orthopedic "Year Book" compares very well with its predecessors. The series is steadily gaining in scope and authority.

DEATHS

Dr. Stanley Curtis Clements of Houston, Texas, died February 9, 1945, at his home, of a chronic bronchial condition complicated by acute congestive heart failure.

Dr. Clements was born August 23, 1879, in Naponee, Ontario, Canada, the son of Dr. Sidney Timothy and Sarah Jane Clements. A few years later, his parents moved with their family to Fairbault, Minnesota. His academic education was received in private schools at Fairbault; Carlton College, Northfield, Minnesota; and the University of Minnesota, Minneapolis. In 1904, he obtained his medical degree from Hamline University, Minneapolis, which later became the Medical College of the University of Minnesota. Dr. Clements began general practice in Montana, but later moved to Nebraska. During World War I he served in the Medical Corps of the United States Army as a Captain, and later as Major. After fighting ceased, he spent some months in demobilization work. Immediately following his discharge from the Army, he entered the University of Pennsylvania for a year of graduate work in internal medicine. He also did postgraduate work at Johns Hopkins. In 1921, he located in Lincoln, Nebraska, where he limited his practice to internal medicine. He was named first chief-of-staff at Bryan Memorial Hospital in that city. He moved to Houston in 1934, and was actively engaged in the practice of cardiology from that time until his death.

Dr. Clements had been a member continuously in good standing of the Harris County Medical Society, State Medical Association and American Medical Association. He was also a member of the South Texas District Medical Society. He was a member of the Episcopal Church, a Mason and a member of the Shrine. He was held in the highest regard by all who knew him.

Dr. Clements was married October 12, 1933, to Miss Enger Robertson of Lincoln, Nebraska. He is survived by his wife; one son by a former marriage, Edmund Clements, Bertrand, Nebraska; one brother, Dr. E. K. Clements of Fairbault, Minnesota; and one sister, Mrs. Donna Weston of St. Paul, Minnesota.

Dr. George Horace Gilbert of Austin, Texas, died February 17, in an Austin hospital, of encephalitis.

Dr. Gilbert was born November 25, 1879, at Hornsby, Travis County, Texas, the son of George and Mandana Hornsby Gilbert. His academic education was received in the public schools of Austin and the University of Texas. His medical education was obtained in the Medical Department of the University of Texas, Galveston, from which he was graduated in 1903. He served an internship in St. Mary's Hospital, Galveston, following which he located in Austin, which was his home for the remainder of his professional life.

Dr. Gilbert had been a member for many years of the Travis County Medical Society, State Medical Association and American Medical Association. During World War I, he served as a Lieutenant in the Medical Corps of the United States Navy and was post assistant surgeon in the Naval hospital at Gulfport, Mississippi. He specialized in radiology and for many years had limited his practice to this specialty. He was held in high regard by his medical associates and the citizenship of Austin.

Dr. Gilbert was married December 12, 1904, to Miss Mabel Pumphrey of Taylor. He is survived by his wife; a daughter, Mrs. G. A. McFarland, Housston; and two brothers, Dr. Joe Gilbert, Austin, and Woodie R. Gilbert, Greenville.

Dr. Walter Emmett Crumpler, of Port Arthur, Texas, died in a Port Arthur hospital, January 8, as the result of injuries received in a fall at his home.

Dr. Crumpler was born in Mobile, Alabama, in 1886, the son of Mr. and Mrs. W. G. Crumpler. He moved with his parents to Athens, Texas, at an early age. His medical education was received in the Medical Department of the University of Texas at Galveston, from which he was graduated in 1909. He practiced in several small communities before settling in Port Arthur, where he had practiced medicine and surgery for the past thirty years.

DR. W. E. CRUMPLER

Dr. Crumpler had been for many years an active member, continuously in good standing, of the Jefferson County Medical Society, the State Medical Association and the American Medical Association. He was a fellow of the American College of Surgeons. He was a member of the Baptist Church and a Mason. He was a former member of the Rotary Club, and a director of the First National Bank of Port Arthur. During World War I he served in the Medical Corps of the U. S. Army. He was a highly esteemed physician and citizen.

Dr. Crumpler was married to Miss Sue Mae Edwards of San Antonio in 1910. He is survived by his wife; one son, Captain W. E. Crumpler, Jr., Billings General Hospital, Indianapolis, Indiana; two sisters, Mrs. Lucius Sharp, Shreveport, Louisiana and Mrs. C. Rickman of Jefferson City, Missouri; two brothers, Carroll Crumpler of Dallas, Texas, and Prentice Crumpler of Wills Point, Texas.

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[1]Deceased.

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

The Wagner-Murray-Dingell Bill, 1945 Version, was introduced in the Senate May 24, 1945, by Senators Wagner and Murray; it is designated S. 1050. On the same date, Representative Dingell introduced a companion measure, with identical provisions, in the House of Representatives; it is known as H. R. 3293. The Wagner-Murray Bill, S. 1050, was referred to the Senate Committee on Finance, and the Dingell Bill, H. R. 3293, to the Ways and Means Committee of the House of Representatives—the same committees to which these bills were referred in the last session of the Congress.

The bills provide for a system of compulsory sickness insurance, as did their predecessors, despite fairly numerous changes which apparently have for their purpose the overcoming of objections raised to the measures in the last Congress. It is particularly noticeable that nowhere in the bill or in reference to it by the authors, is the term compulsory used. In his address when introducing the bill, Senator Wagner placed great emphasis on the provision that any physician is free to participate in the program if he chooses to do so, and that any patient is free to select his own physician. The Senator averred that "health insurance is *not* socialized medicine; it is *not* state medicine." Medicine will agree with the Senator on this point, but not with his inference that health insurance paid for by compulsory Federal taxation and administered by the Federal Government is *not* socialized medicine or is *not* State medicine, and it is believed that most thoughtful laymen will readily dissent with Senator Wagner's views in the matter.

Senator Wagner attempts to claim the sponsorship of medical organizations of the country for a gigantic hospital construction program provided for in the bill, but here again the inference is wrong that American Medicine has or will endorse the program. It far exceeds in cost the hospital construction program provided for in the Hill-Burton Bill, now pending in the Congress, which has been endorsed by officials of the American Medical Association.

Senator Wagner, in presenting the bill, also attempted to convey the idea that proper medical consultation was had in connection with its framing, but the only two organizations with exclusive medical membership named by him, the Physicians Forum, a small group in New York State, and The Committee of Physicians for the Improvement of Medical Care, the former self-appointed Committee of 400, now constituting perhaps 1,000, certainly are not representative of medical thought and opinion in the United States. As *The Journal of the A. M. A.** points out editorially, this disregard of the 125,000 physicians composing the American Medical Association, and "total disregard of the 60,000 physicians now in the armed forces," who have sacrificed so much for their country, is typical of the manner in which the authors of the measure, which would revolutionize medical care in the United States, have from the beginning sought to

*(Ed.) J. A. M. A., June 2, 1945.

impose their "personal notions regarding the care of the public health and of the sick on the people of the United States."

While it is not possible to review the bill in detail here, brief reference will be made to highlights of some of the medical features, and some of the changes in the 1945 version.

First, the social insurance system provided for in the bill would be financed in general from a trust fund established by a 4 per cent employer and 4 per cent employee levy, based on wages and salaries up to the first $3,600 a year paid or received after December 31, 1945. The ceiling in the first Wagner-Murray-Dingell Bill was $3,000, and the proposed contributions were 6 per cent each. Three per cent of the total of 8 is provided for the medical care and hospitalization program; 2 per cent for retirement, survivors and disability insurance; 2 per cent for unemployment insurance, and 1 per cent for temporary disability insurance.

The present bill contains provisions for dental and home nursing benefits not included in the first bill.

Provision for payment for medical services are provided on a fee for service basis, per capita, salary, or a combination of the methods named as elected by 75 per cent of the participating physicians in a community. The freedom of the patient to select his own doctor, so greatly emphasized by Senator Wagner, is limited to the panel of participating physicians, who are free to accept or reject panel patients. There are provisions for services of specialists, consultants, and laboratory and technical services, some of which latter services may be rendered by other than physicians.

The Surgeon General of the U. S. Public Health Service is invested with tremendous authority, as in the first bill. In the present measure there is provision for a National Advisory Medical and Hospital Council, to be appointed from nominees from professional bodies, organizations concerned with medical service, hospitals, education and the public. This Council can only advise. It has no authority. It is appointed by the Surgeon General of the U. S. Public Health Service.

The Surgeon General, as before, has authority to determine the number of patients to be on the panels of participating physicians, and to determine what are specialists' services and who are qualified to serve as specialists in the program.

Those who are entitled to services under Workmen's Compensation laws of the Federal Government or any state, are excluded from services to which they are eligible under such laws.

The present measure also provides for grants-in-aid for research, medical education, and special benefits for veterans.

A splendid analysis of the section of the bill dealing with the proposed system of compulsory sickness insurance, prepared by the A. M. A. Bureau of Legal Medicine and Legislation, and an excellent editorial discussion, appear in the June 2, 1945, number of *The Journal of the A. M. A.*, to which the reader is referred.

Finally, every physician is urged to secure from his Representative or Senator in Congress, a copy of this bill, and determine for himself what the enactment of this measure would do to American Medicine. If the socialization of medicine in the United States is to be prevented, a concerted, united effort will again be required of the American medical profession, who must arouse and inform their patients of the immediate danger that is impending.

We are again at the crossroads. A lazy, lackadaisical attitude will result in defeat. A militant, informed public, expressing its will to Congress, will preserve American Medicine and the American way of life.

Annual Session Postponed.—Reference has been made editorially in the last several numbers of the JOURNAL to the fact that we are prevented from holding not only the annual meetings of our scientific sections and all the features that go to make up the Annual Session, but also the annual meeting of our House of Delegates. The War Committee on Conventions of the Office of Defense Transportation at the present time will not permit meetings where more than fifty out of town registrants may be expected to attend.

It is daily expected that the redeployment of troops from the Western theater through this country, either to the Eastern theater or to different points in the United States, will utilize the full capacity of railroads and cause almost complete stoppage of civilian travel.

This condition, which is something not heretofore experienced in the history of our Association, has projected problems regarding administration of Association affairs. The Board of Trustees, after careful consideration of all factors, has concluded that under the unusual circumstances caused by the war, it will be necessary to continue for the time being the present administrative setup, including the present officers, councils and committees, until a meeting of the House of Delegates can be had; anticipating that such meeting may be allowed in the not too distant future. In the meantime, the Trustees will continue to explore and study the unusual problems presented by the war, in the best interests of the Association.

Further, the Trustees, who are freighted

with the full responsibility of all matter published in the JOURNAL, have decided that the annual reports of councils and committees which customarily appear in the June JOURNAL, will not be published until they can be presented and are acted upon by the House of Delegates.

The Woman's Auxiliary to the Association handled the obstacle by a called meeting of its executive board, which acted for its general body. Its constitution and by-laws are different from our own, particularly in the method of electing officers. The transactions of that organization, and the membership lists of the Association and the Auxiliary appear as per custom in this number of the JOURNAL.

The meeting of the House of Delegates when permitted will be a postponed Annual Session, at which the usual business of the Association is conducted.

Postwar Graduate Medical Training has become a "must" in the field of the practice of medicine. There are numerous reasons for this development. Practicing physicians have all along been anxious about their reeducation in medicine. The multiplication of postgraduate schools and courses, the success of special short courses such as the well known "Clinics", of which we have heretofore had three in Texas, and the large attendance on medical meetings of every sort throughout the country, testify to that fact. Now that the War has so sadly interrupted the orderly procedure in both the study of medicine and its practice, something must be done about it.

Most doctors returning from service with the Armed Forces, particularly after a long period of service, will quite likely find themselves badly in need of some sort of orientation in private practice. That is not to say that the medical officers with the armed forces and its related services, have lost either their knowledge of medicine or their skill in its practice, but certain it is that many of them will be so highly specialized in military medicine that they will have lost track of much that is of value in civilian practice. The American Medical Association has for some years anticipated just such development and has all along been planning to meet it. It will be remembered that the American Medical Association anticipated the needs of the Armed Forces for Medical Officers long before even the first World War. It did the same thing in the matter of the present War. Indeed, the Procurement and Assignment of Physicians Service, which has been so successfully operated during this War, had its inception in the planning of the American Medical Association. We formerly called it "Medical Preparedness." It is still that. It may be of further interest to our readers that the basic principles involved in Procurement and Assignment of Physicians Service was worked out during the first World War, here in Texas, by our Committee on National Defense, Medical Section, of which committee Dr. W. B. Russ of San Antonio, was chairman. Even the doctors who did not get to go to war will need refresher courses, both in general practice and the several specialties. They have all been so busy trying to meet the exigencies of practice under war conditions, that their reeducation, to say the least of it, has not been either continuous or intense. Any system of post-graduate study or any sort of refresher course which will be of benefit to the returning Medical Officer will also benefit the physician who held down the job on the home front.

The Council on Medical Education and Hospitals of the American Medical Association, and the Committee on Postwar Medical Service of that organization, have been seriously studying the needs of the returning medical officers. They have, through the well known questionnaire method, sought to determine just what will be needed in their case. This is not the place for a recitation of the facts and figures resulting from this investigation, but it would seem that the trend of the replies in answer to the questionnaire may point the way. Of the large number of replies received, 79.6% desired re-training of some sort, and 20.4% did not plan taking any special training at all. The periods of time mentioned in the replies varied from three months to a year. Nearly one-half asked for six months training in hospitals. The younger physicians seemed to most want hospital training. Those who did not feel the need of additional training were in the older age brackets, physicians who had been in practice a sufficient length of time to feel that they could reorient themselves through less demanding measures. A great many returning medical officers want to take up such training as will lead to certification by a national board in one of the specialties. A study of the statistics gathered in this investigation would indicate that the hospitals, medical colleges and postgraduate institutions throughout the country are going to need to expand considerably in order to meet the demand. We are advised that they are all planning to do just that. More than a year ago, the service of Procurement and Assignment of Physicians advised that hospital quotas would not be influenced at all by the inclusion of Fellows, Residents, Internes and the like, who are being discharged from the Armed Forces, which should help a lot in developing this sort of reeducation.

Dr. Chauncey D. Leake, Dean of the University of Texas School of Medicine, in a study of this problem and discussions with physicians of our armed forces, has come to the conclusion that the younger men, particularly those who have been at least partially educated by the Government, should be continued in the service rather than the older men, and that the Government should see to it that they are given the opportunity of continuing their education on a rotation basis, and in proper educational institutions. There seems to be a rather general opinion that the older physicians should be granted separation from the service on a "first in, first out" basis, or some other equable and fair principle, it being understood that they each be given at least a two months assignment to study in a hospital or teaching institution of some sort, in order to provide a useful transitional period. It seems quite clear that most physicians now in the service will not be able to arrange for a very extensive period of training following their discharge, at their own expense in money and time. The pay of a medical officer in any branch of the armed forces is hardly enough to permit any savings during the period of service.

In the early days of Procurement and Assignment of Physicians Service, the Eighth Corps Area Chairman, and the Texas Chairman, made the suggestion that medical officers be returned to civil life through the expedient of a leave of several months, on salary, of course, so as to ease the financial strain of the transitional period. Now that the necessity for reorientation in the private practice of medicine has become apparent, the idea seems better than ever, and it has been passed on to the Procurement and Assignment of Physicians office at Washington.

The three Medical Colleges in Texas will naturally take the lead in any educational or reeducational matters pertaining to medicine at this particular time. The hospitals will do their part. Perhaps the routine will eventually be that physicians returning from military service will contact the medical colleges of their choice, respectively, and arrange through them for any hospital or refresher courses they may desire. The medical colleges can be advised as to the participation of the government in any arrangements of the sort. Hospitals will, naturally, be glad to have additional help, but there is a limit to the number of positions they can offer. The capacities of our medical colleges for this sort of teaching will also be limited. Whether there will be any subsidies offered by the Government to help care for the added expenses and set up, or whether it will be necessary that the expenses be assumed by the participants, remains to be determined. Any physician desiring to take on any such training will, as has already been said, write to the Dean of one of the medical colleges.

The Medical Department of the University of Texas has developed rather extensive plans to help out in the dilemma discussed in this editorial. It plans first of all to set up teams of from three to four members of its teaching staff, in the several fields to be covered, and make them available for meetings of county and district medical societies. It is planned to prepare discussions of such topics as hypertension, rheumatic fever, penicillin therapy, gastroenteric disorders, and the like. Short training courses in the school will be arranged for groups in any special field they may desire, and the maximum amount of residency training in John Sealy Hospital will be provided.

Any physician interested in any of these activities, which are more elaborate and extensive than one would judge from the mere reading of the statements here made, should communicate with Dr. George M. Decherd, Jr., the Director, at the University of Texas School of Medicine, Galveston.

An activity of the Medical Branch of the University of Texas, set up as a regular thing, and supported by the William Buchanan Foundation, while not originally designed or intended to meet the emergency created by the separation of doctors from the armed forces and their return to private practice, deserves consideration here. Dr. Arild E. Hansen, Director of a Child Health Program of the University, at Galveston, and connected with the William Buchanan Foundation, is planning broadly and deeply for bettering medical service to children. That is another story, but the service will, as stated, fit in here. The Maternal and Child Health Division of the State Board of Health is coöperating with Dr. Hansen in promoting postgraduate courses in pediatrics, on a limited scale, at Galveston. Such a course was conducted May 14-19, and another will be provided for the period October 22-29. A faculty of distinguished teachers, many of them from abroad, is provided for each course. The State Board of Health will provide an allowance to cover tuition and a per diem for those who attend the courses. Registration is limited to 40 physicians interested particularly in the specialty of pediatrics. Physicians returning from the armed forces will be given special consideration, but any physician practicing medicine in the State of Texas is eligible for registration.

The Department of Pediatrics at the University of Texas, Galveston, has recently

created temporary Fellowships for physicians of Texas who are being released from the armed forces. They will be in the form of residencies of from three to six months duration, or even longer for those wishing to qualify for certification by the American Board of Pediatrics. These fellowships have been made possible by a grant from the William Buchanan Foundation, Texarkana, Texas, and the fellowships will be known as William Buchanan Fellows. These fellowships carry stipends varying from $900.00 to $2,000.00 per year depending upon circumstances. Application must be made to Dr. Hansen.

Baylor University College of Medicine, at Houston, plans refresher courses for the general practitioners who were in practice several years before entering the service. This course will cover approximately three months time, and is designed to be a rapid survey of numerous subjects. It will be divided into lectures, conferences and ward and clinic work. A similar course will be provided for doctors who have practiced but little, if any at all, before entering the service. This course will last from six to nine months. The subjects covered will be presented in a more comprehensive and extensive manner. There will be lectures, conferences, and ward and clinic work, as in the shorter course.

Residencies in the different specialties will be provided for those who are entering the specialties, and will be so designed as to cover the minimum requirements of the specialty boards. The program will include basic science and clinical aspects of the same.

Fellowships will be provided for further training beyond the resident training in the different specialties.

Refresher courses will also be available in the different specialties.

The Southwestern Medical College and affiliated organizations in Dallas, will establish a number of fellowships in the various fields, under which fellowships time will be divided equally between clinical work in the hospital, teaching and research work in the school. Residencies will also be established in Parkland Hospital, and several other hospitals affiliated with the Medical College, covering the various clinical specialties. Opportunities will be given, in connection with such residencies, to take training in the basic sciences.

Brief refresher courses of a few days duration will be conducted by the Dallas Clinical Society, in coöperation with the faculty of the Medical College. It is also planned to present a series of lectures, clinics, ward visits and discussions over the week-end, beginning with Friday evening and including Sunday morning. These will be designed to care for physicians within a close enough radius to make the trip to Dallas by motor Friday afternoon and return Sunday afternoon.

Plans are being devised for short periods of instruction in specific subjects, lasting through a period of a few weeks, in certain selected fields, which are narrow enough that the physicians taking the course can become reasonably proficient within the time allowed.

Teachers from the various clinical fields will be available for instruction purposes in community centers, so that they may travel from one small community to another, lecturing and conducting clinics, as circumstances will allow. The teacher can be either an internist, surgeon, pediatrician, or a specialist in any branch, and may spend as much as a week in a given community and nearby communities. This service would be available to the entire medical profession within convenient range. Such clinicians would be available to practicing physicians for special consulation and examination of patients, without charge.

Thus the residency and fellowship program is intended primarily to meet the needs of the physician returning from service with the armed forces. The remainder of the program is intended primarily to serve the balance of the medical profession.

As stated, the arrangements referred to in this discussion are tentative and will be carried out by each medical college and hospital as circumstances require. No one knows or can guess just how fast medical officers will be released from the armed forces, or anything about it. They are being released, however, and no doubt the hospitals and the educational institutions of the State will be able to take care of the situation. Letters directed to the proper officials will get results. The State Medical Association of Texas is coöperating in every way in these activities, and will properly channel any communication with regard to the matter coming to the Central Office at Fort Worth.

The A. M. A. Bureau of Information, created as the result of action by the A. M. A. House of Delegates at its last annual session, 1944, is now rapidly accumulating data regarding each county in the United States that will be made available on request to medical officers as they return to civilian life. These data are being gathered through the offices of component state medical societies, which, in turn, are calling upon the officers of county medical societies for the material. Pertinent information regarding the medical, hospital, economic, financial, climatic, social and other conditions which will be of interest to med-

ical officers seeking location after their return from the armed forces to civilian life, is what is desired.

A summary sheet calling for such data, with full instructions regarding its execution, on which had been entered all information available in the offices of the American Medical Association, was recently sent through the central office of the State Medical Association to the secretary of each county medical society in Texas, with the request that the information asked for be gathered by appropriate officials or committees of the society. The forms will be returned to the central office of the Association at Fort Worth, and after a duplicate file of the material has been compiled, will be forwarded to the A. M. A.

The information thus being gathered will be of value to the Procurement and Assignment service in Texas, which throughout the war has had to function in connection with relocation of physicians in areas of critical medical shortage, and to the Council on Medical Economics of the State Association, but will be used principally to help returning medical officers to find suitable and desirable locations, when such aid is sought. The program is a laudatory one if it functions as it should. It can function satisfactorily only if each unit—the county, state and national organizations, carry through their respective responsibilities. The Bureau of Information of the A. M. A. will receive hundreds of requests for such service from returning medical veterans. If we have done our part, intelligent, helpful information will be available in the Bureau, which then will refer the inquirer to offices of state medical associations for more specific and detailed information.

Particularly is it desired to know the areas where physicians are needed and where there is reasonable opportunity for developing satisfactory practices, after those who entered service from these areas have returned to their homes. Our Association has a challenge to do something material for those medical officers who have served their country at great sacrifice. Let us meet that challenge as it should be met.

Library Donation Acknowledgments are becoming regular features of each number of the JOURNAL, in response to the appeal by the Library Endowment Committee of the State Medical Association, addressed to county medical societies and published in these columns in the February, 1945, number, page 514. The latest donor is the Bowie County Medical Society, which gave $25.00 on May 13, to be added to the "County Medical Society Library Endowment Fund." This fund now totals $425.00, contributed by eleven of the 126 county medical societies in the state.

Bowie County Medical Society members are to be commended for their support of the library, which renders service to any reputable physician in Texas, on request, as well as to medical officers in the armed services stationed in Texas, and increasingly to students and other laymen interested in health subjects.

Correction, Doctors Singleton and Knight Article May Journal.—This prominence is given to an error which occurred in the title of an article by Dr. O. A. Singleton and Dr. Maynard D. Knight, Galveston, which was published in the May, 1945, JOURNAL, pages 10-16, to call it to the attention of as many readers as possible. The title as published was "Lobectomy and Pneumonectomy for Pulmonary Tuberculosis." It should have been "Lobectomy and Pneumonectomy for Pulmonary Suppuration." How the mistake occurred is baffling, both to the editor and authors, who received and approved a proof carrying the erroneous title, sent for correction. It is a regrettable and unfortunate error. Readers of the article will, of course, find no reference to the surgical procedure in tuberculosis, the discourse being specifically on the subject of pulmonary suppuration.

CURRENT EDITORIAL COMMENT*

New Concepts of Morphine Analgesia.—For many years morphine has been considered to act on the basal ganglia and hypothalamus. This means very little because we do not know too much about the functions of this part of the brain.

Several years ago we were struck by the fact that morphine exhibited many peripheral actions which simulated parasympathetic or cholinergic activity. With this in mind we devised certain experiments which proved that our hypothesis was correct. Furthermore, during these investigations, we found that morphine inhibited choline esterase. This indicated then that morphine possessed the essential features of a true cholinergic drug.

Actually, it was of extreme interest to see whether or not a true cholinergic drug such as prostigmine would increase the activity of morphine peripherally. This was found to be true. As a consequence the next step was to investigate what actions a true cholinergic drug might have on the analgesic powers of morphine. Experimentally it was found in

*This department of the JOURNAL presents editorial comments on current items pertaining to the science, art and practice of medicine, contributed by members of the State Medical Association and scientists closely associated with the medical profession of Texas. Invitation is hereby extended to any member of the State Medical Association of Texas to submit such discussions for this department. The discussions should not be more than 500 words in length.

animals that a very small dose of prostigmine would increase the pain relieving property of morphine to the extent that one needed only half as much morphine when it was given with prostigmine as when morphine was given alone.

Clinical observations indicate that 1/8 grain of morphine plus 1/130 grain of prostigmine gives, in 90 per cent of instances, as good a relief from pain as 1/4 grain of morphine alone. Occasionally it is necessary to supplement this amount with an additional 1/12 grain of morphine.

The above remarks would seem to perhaps change our ideas on how morphins acts. No definite explanation can be given as yet, since the physiologist does not have the answer regarding the production of pain. There is a decided tendency to accept the hypothesis that acetylcholine is a transmitter of central stimuli. The fact that morphine is enhanced by a true cholinergic drug suggests the possibility that morphine may counteract pain by altering the neurohumeral transmission of impulses in the central nervous system.

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ANTIVIVISECTION BILL KILLED

The Baltimore city council recently killed a proposed ordinance which would have prohibited the use of live dogs for experimental purposes in medical schools and laboratories of that city. Commenting on the council's action, *The Journal of the American Medical Association* for May 19 says:

"Baltimore is to be congratulated on this victory for reason and science over the sinister forces arrayed against medical research and the progress of medical science. The tragedy is that the fight in Baltimore will have to be made again and again before state legislatures, city councils and the Congress. Ignorance, fanaticism, false sentimentalism and cynical irresponsibility are diseases for which science has thus far failed to find a remedy, even with the use of experimentation on animals that has yielded so much good to both animals and man."

A three hour hearing preceded the council's action on the ordinance. The most effective testimony was the introduction of two children and the mother of a third whose lives had been saved through a new type of operation by Dr. Alfred Blalock of Johns Hopkins Hospital. Dr. Blalock had worked out his blood vessel surgical technic by experimenting on dogs and, as a result, his method saved the lives of three children, who were born with malformed hearts.

When a nation goes to war, physical fitness of the young men of the country is a vital matter. Fortunately or unfortunately, fitness in our modern civilization, though desirable, is not so essential. Whether a man can chin himself seven times, or jump two feet, is not so important, but maintenance of good health is important. We can recollect many examples of individuals who would be rejected for military service but have been outstanding in business, the professions and the arts. These men and women have triumphed in spite of physical disabilities.—Ed., Minn. Med., Dec. 1944.

THE USE OF SPINOCAIN AS A SPINAL ANESTHETIC

With a Review of Twelve Hundred Cases

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For the past thirteen years I have been using spinal anesthesia to a greater and greater extent in my operations on the abdomen and lower extremities. With time, the indications that I follow in its use have been widened, the contra-indications reduced in number. In a series of 1,200 spinal anesthesias my experience has been that the method is comfortable for the patient, convenient for the operator, and, of course most important, that it is a safe method both as to life and as to the occurrence of serious complications. My experience is in no sense unique. Spinal anesthesia is today accepted as one of our most valuable methods of anesthesia. But it is not a subject on which the last word has been spoken. In matters of theory and of technic it still offers an enticing field for the exploring intellect.

One of the problems of spinal anesthesia which from the earliest days has received most attention is that of control of the movement of the anesthetic drug after its injection into the spinal canal. Numerous methods of control have been devised, but no one method has yet found universal acceptance.

The anesthetic drugs employed tend strongly to fixation in the nerve roots. Fixation, however, is not instantaneous. Meanwhile, the solution spreads. The spread of the injected anesthetic solution depends on a number of factors, but the most important of these is the force of gravity. To exploit this force, the solution may be made heavier or lighter than the spinal fluid and the posture of the patient is regulated in accordance with the choice that is made. To increase the specific gravity of the solution, the usual method is to add dextrose. To decrease the specific gravity, two methods are available; one is to add alcohol, the other is to employ an anesthetic drug so powerful that it may be used in extreme dilution. Percaine is such a drug; it is effective in a dilution of 1 in 1,500, which gives a solution for injection that is lighter than the spinal fluid.

As an aid in retaining control of the spread of the anesthetic drug, many of the solutions used today contain a viscid substance the purpose of which is to slow diffusion of the solution in the spinal fluid and hold the drug in contact with or close vicinity to the particular nerve roots which it is

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desired to anesthetize until it shall have become fixed in them. In the heavy solutions, dextrose fulfils the two requirements of raising the specific gravity of the solution and of rendering it viscid. In solutions lighter than the spinal fluid, dextrin or gliadin or some other form or derivative of starch is used for the latter purpose.

Various methods of gravitational control have been devised, some of which seem, perhaps, over-elaborate and even a trifle fantastic to those of us who have been getting good results through simpler means. Etherington-Wilson[13] computes the number of seconds which it should take a solution of known specific gravity, less than the specific gravity of the spinal fluid, to rise a certain distance in the upright spinal canal. He injects the solution with the patient sitting and at the end of the computed time places the patient in a 15 degree Trendelenburg position to stop the climb of the solution. The time during which the solution is permitted to travel cephalad depends on the height of the patient and on whether a low, median or high block is required. He claims that in more than 1,500 spinal anesthesias given by him with this technic there has been no instance of loss of control of the ascending solution. Hillman[3] reports "full satisfaction" with this technic in 1,250 operations. Two queries will rise in the mind in connection with this technic: first, the safety of *ever* injecting into the spinal canal an anesthetic solution of lower specific gravity than that of the spinal fluid, with the patient sitting up; second, the dependability of Etherington-Wilson's finding of "a remarkable constancy" as between different individuals in the specific gravity of the spinal fluid, on which his timing computations rely.

Kirschner's[4] technic employs injected air as means of control. With the patient in a 25 degree Trendelenburg position, he first withdraws the spinal fluid in the caudal end of the sac and replaces it by air. A small dose of a viscid anesthetic solution, lighter than the spinal fluid, is then introduced. This floats on the interlevel between spinal fluid and air. By further injections of air under control the solution is forced cephalad to the desired level and held there until the operation is completed. An advantage of this technic would seem to lie in the fact that only a small dose of the anesthetic agent would be needed, even for high anesthesia.

Lake[6] puts stress on the normal variations in the dorsal curve as a factor that must be reckoned with in any accurate control of the spread and localization of the anesthetic solution by gravitation. In dorsal decubitus the spine is in contact with the table and the lowest point of this curve cannot be visually determined. He has devised a method to overcome this difficulty. He first places the patient face down on the table with the lower chest raised by pillows to produce a well marked dorsal curve and marks the position of the intercristal plane, the second-third lumbar interspace and the seventh dorsal spinous process with iodine smears on the skin. The dorsal curve is now "sighted" against a horizontal black line on the wall of the operating room and the table is tilted until the marked seventh dorsal spine lies at the apex of the curve. The injection is now made and after a ten minutes' wait the patient is placed on his back with pillows removed and head flexed well down. Lake states that he has used this technic in many hundreds of cases with uniformly good results. He uses a primarily light percaine solution brought up to a specific gravity of 1.00345 by addition of salt. He emphasizes the precaution of warming the solution to body temperature or a little above, since the specific gravity of the solution varies rapidly with temperature. He gives the average specific gravity of the spinal fluid as 1.0065.

My own practice has been to use spinocain, first described by Pitkin[10] in 1927 and introduced to the profession in the following year. I follow his original technic. In addition to the anesthetic drug novocain, spinocain contains strychnin sulphate for its pressor effect, alcohol to lower the specific gravity of the solution to a point far below that of the spinal fluid, and gliadin (the mucilaginous content of wheat starch) to give viscosity.

The injection is given with the patient in the lateral recumbent position with chin and flexed lower extremities approximated as closely as possible to prevent twisting of the spine and to separate the lumbar spinous processes. Since the specific gravity of the solution is only 1.0005, the injection must never be made with the patient sitting. The spinal puncture is preceded by anesthetization of the skin and deeper tissues by injection of a novocain solution to which ephedrin has been added as a prophylactic vasoconstrictor. On completion of the injection of spinocain into the spinal canal, the patient is turned on his back and the table immediately adjusted to a ten degree Trendelenburg position.

One cubic centimeter of spinocain contains 100 mg. of novocain. Two cubic centimeters is sufficient to bathe all the lumbar nerves and anesthetize the lower extremities. For anesthesia to the umbilicus I use 3 cc.; to the tip of the xiphoid process, 3.5 to 4 cc. My average dose of novocain has

been 315 mg., the largest dose that I have given is 400 mg.; the smallest dose 75 mg.

Throughout the period of anesthesia the patient is kept under strict observation with blood pressure taken at 5-minute intervals. The observer must be alert to recognize instantly the approach of any untoward occurrence, for the remedy should be applied before, and not after, its full manifestation.

To allay fear and apprehension and to make the patient more comfortable we usually administer 3½ grains Nembutal orally two hours before the operation; and ¼ gr. morphine and 1/150 gr. scopolamine subcutaneously one hour before operation.

The dosages are reduced for older and weaker patients and in patients over 60 barbiturates should be used with care.

In all abdominal cases I keep the patient in the Trendelenburg position until the following morning. Metrazol or coramine is given postoperatively to counteract the effects of sedation. One hypodermoclysis is given, and 1,000 cc. of normal saline and glucose is injected intravenously twice daily for the first few days.

In my series of 1,200 spinal anesthesias there have been no deaths attributable to the anesthesia.

Six hundred and ninety-six of the patients of the series were females, 504 were males.

The youngest was 10 years old, the oldest was 84. The distribution of patients according to age is shown in table 1. It has been found untrue that children make poor subjects for spinal anesthesia.

TABLE 1.

Ages	No. of patients
1 - 10	8
11 - 20	57
21 - 30	174
31 - 40	294
41 - 50	300
51 - 60	176
61 - 70	128
71 - 80	56
81 - 90	7
	1,200

In 330 of my patients anesthesia extended to the level of the clavicle, in 162 to the nipple line, in 192 to the umbilical level, in 349 to the costal arch (see table 2).

The spinal anesthetic failed completely in 76 of my 1,200 cases and supplementary inhalation anesthesia was required in 92 cases —ether in 28 cases, nitrous oxide in 45 and nitrous oxide and ether in 19. The percentages are: death during or immediately following the period of anesthesia 0.0, complete failure 0.063, partial failure, requiring supplementary inhalation anesthesia 0.077.

The post-anesthetic disturbances were limited to a few headaches, a few backaches, and in 2 cases some pain along the outer sides of the right leg and ankle (superficial peroneal nerve) persisting for a few days. There have been no ocular or peripheral paralyses.

Important modifications in the composition of his solution have recently been advocated by Pitkin.[11] The solution which he now uses contains suprarenin and ephedrin. The latter is included primarily to synergize the suprarenin. It is on suprarenin that he mainly depends as pressor agent. It is his belief that the fall in blood pressure in spinal anesthesia results from anesthetization of the suprarenals with consequent cessation of function. The suprarenin is protected against systemic oxidation by the semi-permeable osmotic membrane which is formed between the solution and the spinal fluid by precipitation of the gliadin in the solution. Pitkin claims that with his new solution not only is the blood pressure stabilized, but the anesthesia is intensified and prolonged to the extent that 300 mg. of novocain will give upper abdominal anesthesia for from two to two and one half hours and 200 mg. will give lower abdominal anesthesia for three hours.

The fall in blood pressure which is so commonly seen in spinal anesthesia has been the subject of much discussion in the medical literature. The problem has recently been reviewed from numerous angles by Papper, Bradley and Rovenstine. The theory of interrupted secretion of suprarenin as responsible for the fall is rejected by these authors. Neither do they accept the explanation by arteriolar dilatation from vasoconstrictor paralysis, to which the majority of investigators of the subject adhere. Their studies have led to the belief that the stagnation of the blood occurs in the postarteriolar bed.

TABLE 2.

Upper limit of anesthesia	No. of patients
Clavicle	330
Nipple line	162
Umbilical level	192
Costal Arch	349
Not satisfactory?	50
Not indicated	41
Failures	76
	1,200

The subject is obviously a complicated one. The same data, as Cullen[1] observes, have received diametrically opposed interpretations, and it would seem that there is some fundamental factor that is still imperfectly understood.

There is disagreement also as to the clinical nature and the gravity of the phenomenon.

Does it partake of the nature of surgical shock? Koster[5] and associates think not. Even when marked, it is not, they feel, of great clinical significance. Papper[9] and his co-workers, on the other hand, believe that a severe fall adversely affects the morbidity and mortality of the surgical procedure.

Clinically and experimentally and regardless of the theory of origin of the hypotension, ephedrin and oxygen have proved their value in treatment. Administration of oxygen during spinal anesthesia rests on a sound basis, for, as pointed out by Ruth and Grove,[12] there is decrease in blood oxygen and increase in carbon dioxide with low blood pressure, and cellular oxygen want depresses the sensitivity of the vasoconstrictor centers and decreases the efficiency of ephedrin.

It must always be borne in mind that the circulatory adjustments of the patient under spinal anesthesia, and especially high spinal anesthesia, are particularly vulnerable to operative insults, and even those of mild character may be followed by severe drop in blood pressure. Important as is gentle handling in all operations, it is, for this reason, still more important when spinal anesthesia is being used.

I have had no personal experience with Lemmon's method of "continuous" spinal anesthesia, in which the needle is left in position and anesthesia is maintained by supplemental injections delivered at intervals. The method requires special needle, tubing and mattress. Advantages claimed for it are (1) smaller initial dose, enhancing safety; (2) the possibilities of maintaining anesthesia over a prolonged period, (3) of deepening it when required, and (4) of individualizing the total dose to the need of the patient, be this greater or less than the standard requirement, and (5) the possibility, according to Hale and Shaar,[13] of removing the drug from the spinal canal in case of untoward effect. It would seem that this method might prove a boon in exploratory laparotomies and other operations in which one is uncertain beforehand of the amount of work that will need to be done.

SUMMARY

A series of 1,200 spinal anesthesias is reported, with mortality nil; complete failure in 76 cases, or 0.063 per cent; and partial failure, requiring supplementary inhalation anesthesia, in 92 cases, or 0.077 per cent. Spinocain with Pitkin's original technic was used. Various methods of controlling the spread of the anesthetic solution by gravity are discussed and several theories relating to the blood pressure during spinal anesthesia are mentioned.

REFERENCES

1. Cullen, S. C., in discussion on Papper, E. M., Bradley, S. E., and Rovenstine, E. A.: Circulatory Adjustments during High Spinal Anesthesia, J. A. M. A. 121:27-32 (Jan. 2) 1943.
2. Hale, D. E., and Shaar, C. M.: Continuous Spinal Anesthesiology, 5:53-60 (Jan.) 1944.
3. Hillman, O. S.: A Technique for Spinal Anesthesia, Lancet, 2:722-724 (Sept. 24) 1938.
4. Kirschner, cited by Lake, N. C.: Precision in Spinal Anesthesia, Lancet 2:241-246 (July 30) 1938.
5. Koster, H., Shapiro, A., and Goldberg, A.: Spinal Anesthesia and Surgical Shock, Arch. Surg. 42:795-800 (April) 1941.
6. Lake, N. C.: Precision in Spinal Anesthesia, Lancet 2: 241-246 (July 30) 1938.
7. Lemmon, W. T.: A Method for Continuous Spinal Anesthesia; A Preliminary Report, Ann. Surg. 111:141-144 (Jan.) 1940.
8. Lemmon, W. T., and Paschal, G. W., Jr.: Continuous Spinal Anesthesia, Pennsylvania M. J. 44:975-981 (May) 1941.
9. Papper, E. M., Bradley, S. E., and Rovenstein, E. A.: Circulatory Adjustments during High Spinal Anesthesia, J. A. M. A. 121:27-32 (Jan. 2) 1943.
10. Pitkin, G. P.: Controllable Spinal Anethesia, J. M. Soc. New Jersey, 24:425-438 (July) 1927.
11. Idem: A Nonoxidizing Epinephrine to Prolong Spinal Anesthesia with a Subarachnoid Capacity Control, Anesth. & Analg. 19:241, (Sept.-Oct.) 1940; 19:315 (Nov.-Dec.) 1940.
12. Ruth, H. S., and Grove, D. D.: Trends in Spinal Anesthesia, Am. J. Surg. 59:462-472 (March) 1943.
13. Wilson, W. E.: Intracthecal Nerve Rootlet Block: Some Contributions: A New Technique, Anesth. & Analg. 14:102-110 (May-June) 1935; Specific Gravity of the Cerebrospinal Fluid with Special Reference to Spinal Anesthesia, Brit. M. J. 2:165-167 (Aug. 7) 1943.

SOME PROBLEMS IN RHEUMATIC FEVER

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Rheumatic fever stands today, throughout the nation, as the third most common infection of all age groups, being outranked only by tuberculosis and syphilis. In the age group of 5 to 9 years, it is outranked only by the combination of the four major communicable diseases; from 10 to 14 years, it causes more deaths than any other disease; and from 15 to 24 years, it is outranked only by tuberculosis. In fact, during the past decade, rheumatic fever has been responsible for one out of every eight deaths from disease among children and young adults. The number of cases of rheumatic heart disease throughout the nation has been conservatively estimated to be from 800,000 to one million. Despite this prevalence, many obstacles beset our path of understanding and many problems yet remain. These might be enumerated in four categories:[14] (1) the etiology is obscure; (2) few, if any, tests, for diagnosis exist, such as the tuberculin or Wassermann tests. In their absence, the physician is forced to rely on his wits and the use of the stethoscope. (3) Nothing specific, except experimental and empirical drugs, is available for prevention; and (4) in absence of knowledge concerning the etiological agent, no specific therapy is available. There are other problems, especially concerning the clinical aspects, but for the

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present I should like to evaluate the above problems in the light of our present knowledge and point out a few recent advances that pertain to their solution.

Etiology: As will be recalled, at least seven theories have been "cast upon the waters" regarding the etiology of rheumatic fever.

1. Around the turn of the century a streptobacillus was grown from the blood stream of several cases of rheumatic fever and given the name "diplococcus rheumaticus."[15] This work was never confirmed and the *bacteriemic theory* was soon discarded.

2. Small, in 1927, grew a hemolytic streptococci from blood and various foci in the body, as well as from the heart. He postulated that these organisms liberated a toxin, which in turn caused the rheumatic lesion. He prepared an antiserum from rabbits previously injected with the organism and it was quite the vogue to treat acute cases of rheumatic fever with the "Small vaccine" for many years. Corroboration of his bacteriologic work and the value of the antiserum has never been forthcoming, and thus the *"toxic theory"* has fallen by the wayside.

3. Swift, at the Rockefeller Institute, along with Derick and Hitchcock, began a series of intriguing experiments in the early 20's. They pointed out the similarity between the pathologic lesions of tuberculosis, syphilis and those present in rheumatic fever, namely, the production of granulomatous tissue.[11] Utilizing the allergic nature of some of these lesions, they postulated a similar hypersensitiveness in rheumatic cases. Culturing a group of streptococci from the nasopharynx, they prepared streptococcal filtrates. Unfortunately, when controlled series were accumulated, such as that of Gibson, Thomson and Stewart (1933, using 266 rheumatics and 264 with other illnesses), the evidence of positive skin reaction to these products were about equal. With this demonstration of no essential difference in the two groups, the Swift hypothesis was forgotten.

4. In 1934, Rinehart and Mettier postulated a deficiency as the causative factor. They analyzed the dietary history of a group of rheumatics and found them lacking, particularly in vitamin C. They proposed that sub-clinical scurvy plus superimposed bacterial infections caused the lesions. They produced experimental lesions in the hearts of guinea pigs, which they felt were the counterpart of those occurring in human cases. Other investigators failed to confirm this experimental work. Dietary histories, although showing a definitely poor trend in the class of patients coming from the lower income groups that yield rheumatics, nevertheless were not markedly different from those taken from a comparable group of non-rheumatics. Although increased vitamin C utilization has since been shown to be present in the rheumatic state, it is also well recognized as being present in other febrile illnesses, so that no specificity has ever been proved.

5. One other well-planned group of investigations should be mentioned, namely those of May Wilson, who felt that the incidence of streptococcal infection in the presence of rheumatic fever was only coincidental and that the main factor was that of a genetic susceptibility, that is, families presented an increased incidence of rheumatic fever susceptibility. From a series of 105 well documented families, she postulated that hereditary factors are primarily responsible for familial concentration of rheumatic fever. She further postulated that genetic susceptibility for rheumatic fever is transmitted as a single autosomal recessive gene. She felt that the age of susceptibility must also be considered.

6. A word should be mentioned about the pleuropneumonia-like organisms. These are organisms midway between bacteria and the viruses; they are frequently called "L" organisms. These organisms were studied very carefully by Klieneberger.[10] About 1938 to 1939, Swift and Tom Brown[18] reported the identification of such organisms in material obtained from rheumatic hearts and exudates, when grown on the chorio-allantoic membrane of the chick embryo. Several other investigators reported similar results. However, at a somewhat later date in 1939 and repeatedly since then, this work has been shown to be somewhat premature as similar organisms are apparently obtainable routinely from the mouse lung tissue as utilized in the experiment.[10] In addition, other virus studies have been done by a group of workers, but thus far the relationship has never been more than one of philosophical theorizing.

7. *The role of the hemolytic streptococcus.* The frequency of tonsillitis preceding rheumatic fever has been noted for many years. In 1929, Coburn made the first of a long series of observations relative to the hemolytic streptococcus and rheumatic fever. He pointed out that scarlet fever and rheumatic fever were rare in Puerto Rico, but that soon after Puerto Ricans came to New York City they developed pharyngitis and hemolytic streptococcal tonsillitis. Soon after, rheumatic fever became prevalent in this group. He transplanted 11 rheumatics to Puerto Rico in 1929 and found that they soon became rheumatic fever inactive, but that when they returned to New York City and developed new nasopharyngeal infections, from

which hemolytic streptococci were cultured, activity and recrudescences occurred.[3] In order to study the effects of the streptococcal infection further, he began studying the immunologic make-up of these patients and developed an *antistreptolysin* test.[4] He found that the titer rose after streptococcal infections. From then until the present time, most of the discussions in the literature have concerned themselves with the relationship of the hemolytic streptococci to the rheumatic state.

I should like to digress for a moment to discuss some recent work concerning the hemolytic streptococcus. All of us have fairly well accepted the position of the hemolytic streptococcus in either preceding or starting off the rheumatic state. It might be well to review the four methods of diagnosis of streptococcal infections. As pointed out by Boisvert, these are: (1) Clinical—classical scarlet fever and erysipelas or a typical fiery red throat, perhaps associated with visible cervical adenitis and the presence of spontaneously discharging ears, all strongly suggest streptococcal disease. (2) Bacteriologic culture. The work of Rebecca Lancefield and of Griffith has taught us that streptococci may be grouped A, B, C, etc., and that only hemolytic streptococci of group A are pathogenic for the human. Furthermore, that group A may be subdivided into some thirty odd strains or types, analogous to the typing of pneumococci, by means of the slide agglutination technic and that in this fashion, identification of the exact causative agent in epidemics can be ascertained. (3) Serologic tests—antifibrinolysin or antistreptolysin—are useful, especially in protracted illnesses. (4) Finally, epidemiologic evidence—that is, evidence of recent streptococcal disease in the family or in the immediate environment, furnishes a valuable lead to the diagnosis.

Mote and T. Duckett Jones[13] studied the value of these tests and the relationship of hemolytic streptococci in rheumatic states, as well as in a large number of controls, consisting of healthy persons, as well as in a control group of sick persons with illnesses other than the rheumatic state, including, however, 245 cases of rheumatoid arthritis. Prior to starting their series, they studied the specificity of the various tests, especially in their control group. They state that one might perform the antistreptolysin "O" or "S" tests, the former that of Todd, the latter of Coburn, or one might utilize antifibrinolysin (Tillett and Garner), or that one might use various precipitin tests, such as precipitin tests for the carbohydrate substance, "C" or of "M" substance of Lancefield, or one might test for the D, E, K, and P protein fractions of Heidelberger and others, but after much study they finally selected the antistreptolysin "O", the antifibrinolysin and the precipitin C tests as the most representative and the most specific of the group. They confirmed the work of Boisvert[1] on antifibrinolysin as the most practical of the group, simple and extremely specific for streptococcal illnesses when one utilized repeated tests over a period of time. In essence, then, they were testing for the presence of antibodies to streptococcal organisms in the various groups of cases. Of great interest is the fact that they found that antibodies occurred in some 24 to 40 per cent of these control groups, indicating that there was a high incidence of subclinical streptococcal infections. Furthermore, they found that children and young adults, living under poor economic conditions in close, crowded quarters accounted for the major portion of the antibodies to the hemolytic streptococcus. They found, further, that children and young adults in Florida coming from the lowest income group had an incidence of hemolytic streptococcal antibodies in the same range as that of individuals of higher income levels in Boston. They found that subclinical infection, as indicated by the presence of streptococcal antibodies, occurred throughout the entire year, although the highest percentage occurred in the late winter and early spring months.

Their second group of investigations were the application of these tests to patients with known scarlet fever and with known hemolytic streptococcal respiratory tract infections and to those having acute rheumatic fever in the first attack. In the fall of 1934 they began their series and studied cases until the summer of 1935. They had 124 cases of scarlet fever, one-half of which had complications. They also studied 206 cases of respiratory infections with streptococci, as well as 749 rheumatics. Of the 124 patients with scarlet fever, 85 per cent developed serologic evidence of antibody response and, more importantly, of those with severe scarlet fever, with or without complications, some 98 per cent showed evidence of a serologic relationship to the hemolytic streptococcus. Of the 206 patients with hemolytic streptococcal respiratory illnesses, 91 per cent showed an antibody response. Since the antibodies were of diagnostic value, they then applied the test to patients with primary rheumatic fever. They studied 87 first attacks, 62 of which were associated with previous episodes of respiratory infections, 23 of which were of the type spoken of as "spontaneously" occurring. They found that 95 per cent of the first group responded with antibodies and that if these cases were subclassified as to sever-

ity, 100 per cent had streptococcal antibodies. Furthermore, in studying the "spontaneous" cases, they found that 83 per cent revealed an immune response with streptococcal antibodies, indicating that they had had subclinical streptococcal infection, unrecognized. In studying 179 cases of recurrent rheumatic fever, they found that 95 per cent of those with severe recurrences demonstrated streptococcal antibodies, indicating previous infections with streptococci.

They summarized their work by stating that: (1) a high percentage of individuals convalescent from hemolytic streptococcal infections developed antibodies. (2) No difference could be ascertained between scarlet fever and the usual hemolytic streptococcal infections. (3) The results in 87 first attacks were similar to that of non-rheumatic data, suggesting strongly an association of rheumatic fever with the hemolytic streptococcus. (4) The serologic data of 179 recurrences emphasizes the importance of hemolytic streptococcus in recurrent rheumatic fever. (5) That a majority of recurrences were preceded by a clinical upper respiratory infection, associated with hemolytic streptococci and that neither age nor duration of the previous inactive phase of the disease, prior to the recurrence, had a significant effect on the hemolytic streptococcal-rheumatic fever association. And (6), they discovered no basic difference between the rheumatic and the non-rheumatic ability to respond with antibodies. Finally, they concluded that data of their study were interpreted to indicate that hemolytic streptococcal infections were important factors in rheumatic fever. That they were the only factors they thought were unanswered. They also felt that the mechanism for producing the rheumatic fever was as yet unexplained.

Prophylaxis.—If for the time being, then, for want of a better theory, we accept the postulate that rheumatic fever has a definite relationship to hemolytic streptococcal infection, either directly, or more probably, as the end result of an antigen-antibody reaction affecting the mesenchymal tissues, we have a stepping stone to some recent prophylactic measures. Coburn has pointed out, as have Paul and Jones, that there are five fundamental environmental conditions which favor the development of streptococcal epidemics: (1) susceptibility of the host to streptococcal infection; (2) a high rate of change of population; (3) overcrowding; (4) widespread activity of a respiratory virus, such as that giving rise to the "common cold," influenza and measles; and (5) the presence of one or more strains of hemolytic streptococci endowed with a great communicability.

Beginning in 1937, the sulfonamides were first introduced into this country. Several groups of observers, Massell and Jones[12] of Boston, Thomas and France of Baltimore, Kuttner and Reyersbach of New York, Coburn and Moore of New York, and Hansen, *et al* of Minnesota, started series both of treatment and of prophylaxis of patients in the rheumatic state. We shall bypass the therapeutic group for the time being and concern ourselves only with the prophylactic results. Preliminary reports were issued in 1938 and 1939; follow-up reports in 1940 and 1941. In brief, the total of such cases in the latter part of 1942 revealed that there have been collected in the literature 648 cases of inactive rheumatic fever in a highly susceptible population and that when placed on sulfanilamide in extremely small doses, from the months of October to June of each year, the total number of recurrences has been 6, or a little less than 1 per cent.[20] In each instance, control cases very well pedigreed as to the frequency of recurrences in this population, have been followed concurrently with the experiment and the average recurrences have varied from 30 to 40 per cent.

I need not go into the reasoning associated with this amazingly valuable prophylactic measure. Obviously, the sulfanilamide acts to prevent the frequent streptococcal nasopharyngeal infections this group ordinarily harbors throughout the streptococcal season, as well as throughout the year. After much juggling, the final dose that is usually given is in the nature of 1.6 to 2 Gm. daily, usually divided as 10 grains in the morning and 10 in the evening. Blood counts are made at frequent intervals during the beginning of therapy and then spread to two to four-week periods. The only exception to the above statistics has been the fact that occasionally acute attacks occur within one to two weeks after starting of therapy. In such instances, of course, the reaction to the streptococcal infection was already on its way and merely testifies to the fact that sulfanilamide does not change the immune response which probably underlies the advent of rheumatic recurrence. With this scheme of dosage, the toxic reactions to sulfanilamide are few and consist mainly of an occasional rash, rare fever elevation, and thus far only one report of agranulocytosis. Because of low toxic properties, it is felt that sulfadiazine will probably be the preferable drug of the two, but because of its expense with the long continued therapy needed for these patients of low income status, no large series with sulfadiazine has thus far been carried out. The results in

small series with sulfathiazole and sulfadiazine show no improvement over statistics compiled with the use of sulfanilamide alone. This, then, testifies rather strongly, once more, to the advantages of reasoning that hemolytic streptococcal infections are intimately involved in the rheumatic fever problem. That the sulfanilamide prophylactic measures are specific, are further proved by a nice experiment of Coburn.[5] Having pedigreed cases in which there had been no recurrences for several years on sulfanilamide therapy, whereas their previous susceptibility had been high, he then removed the sulfanilamide from 100 cases during the 1939-1940 series. The result was the development of hemolytic streptococcal infections in 32 of these patients, 40 per cent of whom developed rheumatic fever.

Another mode of prophylaxis is available: Coburn[6] reasons that rheumatic fever can be prevented if the rheumatic subject is protected from hemolytic streptococcal infections, either by changing his environment or by maintaining a high blood level on sulfanilamide. He remembered also the clinical observation that salicylates are effective in preventing serum sickness, as pointed out by Swift and his co-workers many years back. A group of fundamental observations showed that salicylates in some way interfered with the antigen-antibody response. Believing that serum sickness, and its histopathology as well as immunology, was not very far removed from some of the changes which occur in the rheumatic fever reaction, Coburn postulated three phases in rheumatic fever development. Phase 1 lasts for but a few days, wherein the patient has an hemolytic streptococcal upper respiratory infection. Phase 2 is a symptom-free incubation period, usually lasting some ten to fourteen days, followed quickly by phase 3, wherein immunologic changes are seemingly associated with the development of the attack. He pointed out that at the end of phase 2 there was a diminution of the serum complement, suggesting an antigen-antibody reaction, and that phase 3 was accompanied by the appearance of streptococcal precipitins. Schlesinger[17] in England had given salicylates in doses of 2 Gm. daily during phase 1 and phase 2 to 16 patients and found no serious recrudescences had occurred. Coburn reported a group of 47 patients to whom he gave 4 to 6 Gm. of salicylates for a four-week period as soon as pharyngitis or upper respiratory infection occurred, in which group A hemolytic streptococci were obtained. Only 1 of the 47 patients developed an attack of rheumatic fever three weeks following the upper respiratory infection, and no other signs of rheumatic fever activity were clinically obtained. It should be pointed out that no modification of the antistreptolysin curve occurred. However, antigen-antibody precipitation and the occurrence of M precipitins was prevented. In a control group of 139 patients not given salicylates, 57 developed rheumatic fever in the same season. So that in recent years, we now have two modes of prophylaxis to ward off rheumatic recurrences; one excellent, the other very suggestive, although needing confirmation.

For a moment, I should like to return to the five points emphasized by Coburn as favoring streptococcal epidemics. This is not academic philosophizing, for already epidemics have been reported from numerous Army Station and General Hospitals and at least three like series have been reported from Naval Training Stations in this country, as well as in the British Isles. As to the susceptibility of the host for streptococci, obviously these recruits are out of the 5 to 15 age group, but are still young enough to fall within the 5 to 25 age zone. Also, many of these patients have had episodes of rheumatic fever in the past, some subclinical, others clinical, data of which have not been given to examining officers and many times not even requested. In addition, there are other groups who have filtered through preinduction, induction and even Station hospital examinations with heart lesions. Placing this group of susceptible men in a situation where overcrowding exists, it is obvious that two of the best foundations for epidemics of streptococcal infections are being laid. The third factor is present also, that is, the fact that into this population comes a large new group, frequently with carriers and new susceptibles. In addition, one must not forget that many of these susceptibles have come from rural communities with previous lack of exposure and are now being mixed with those of urban communities who are carriers. Furthermore, isolation is impossible under war time conditions in overcrowded barracks and obviously allows a virulent strain of hemolytic streptococcus to run rampant and assume great communicability. If, to this, we add the occasional presence of upper respiratory virus epidemics, we have all of the five frequently mentioned causes that lead to large epidemics of streptococcal infections. The indications are clear, but war time conditions prevent much being done about them.

THERAPY

Many of these points are fascinating and may undoubtedly lead to future practical application, but thus far, total application has not been very great for the handling of the rheumatic fever patient who already has

activity. In fact, therapeutic application has been nil. Nevertheless, it has been long realized that prevention would be of much greater value than any therapeutic efforts and it would seem that preventive measures, at least, have assumed a successful place. I should like to mention one further recent advance which first appeared in the literature in the September, 1943, *United States Naval Medical Bulletin*[7] and, more recently, in the December, 1943, issue of *Johns Hopkins Bulletin*.[8] This, again, is the work of Coburn and concerns itself with the use of salicylates in therapy. This work is new and has not been thus far confirmed by others. Much of its background has to do with Coburn's theories as to the causation of rheumatic fever, which are not accepted by all workers in the field. Nevertheless, the work seems promising and I believe should be repeated in numerous institutions where the opportunity exists, especially inasmuch as our therapeutic tools heretofore have been fairly negative. As I have stated repeatedly, Coburn feels that rheumatic fever is due to a respiratory pathogen (the hemolytic streptococcus, group A) which liberates an antigen and thus produces an abnormal antibody response in the rheumatic subject. He feels further that no methods are thus far known to suppress the liberation of the antigen, the bacterial agent or for modifying the constitutional defect in the host. For this reason, he feels that all efforts must be made to modify the inflammatory reaction that results in the mesenchymal tissues as a result of such antigen-antibody precipitation. He points out that salicylates do not affect the agent nor the immune response, but that if salicylates could be shown to modify the sterile inflammatory reaction which occurs during activity, they might be expected to inhibit the development of cardiac disease which, as we know, is the crippling feature and the main factor that leads to fatal issue in the disease. Of all the guides that we might have to such action of salicylates and to such resolution of the inflammatory reaction, he feels that the utilization of the sedimentation rate, as well as the clinical signs, would be the best. He has introduced data tending to prove that salicylates prevent the precipitation of antigen by antibody in vitro and that the effect is more marked as the concentration of salicylates in the system is increased; that the immune system becomes progressively less sensitive to the action of salicylates as an excess of antibodies becomes larger. Thus, that the effects of salicylates seem to be due to action on the antibody, probably by way of the cellular enzyme system.

Applying these experiments to the human for an in vivo trial, Coburn reported 64 patients in the Naval *Bulletin* of September, 1943. These 64 patients fell into the 17 to 28 year range, had been admitted to the Naval Hospital early in an acute attack of rheumatic fever. They were divided into three groups. Group 1 consisted of 43 men who were given salicylates in the usual symptomatic dosage, that is from 3 to 6 Gm. daily, sufficient to modify the arthritis and change the temperature curve. Of these, 4 of the patients had mild monocyclic attacks and the sedimentation rates fell at the end of from two to four weeks. Nineteen had polycyclic attacks, the sedimentation rates fluctuating high for from four to twenty weeks; of these, 16 developed mitral disease, so that in summary, one might say that with the usual symptomatic dosage of salicylates as therapy, 40 per cent had polycyclic attacks, the majority of whom revealed future cardiac involvement.

Group 2 consisted of 7 patients who had severe attacks, and these patients were given 10 Gm. of sodium salicylate daily until the sedimentation rates remained normal for a two-week period. All of these showed a progressive fall of the sedimentation rate within two weeks from the beginning of therapy and none developed signs of valvular heart disease on follow up studies.

Group 3 was comprised of 12 patients with severe rheumatic attacks, each of whom received infusions of sodium salicylate, 10 Gm. daily for two weeks. Without exception their sedimentation rate fell progressively and were normal or approached normal after about 14 infusions. At this time, the sodium salicylate was changed to 10 Gm. daily until the sedimentation rate had been normal for a two-week period. These patients also developed no valvular disease, although half of these 19 patients in groups 2 and 3 had had electrocardiographic evidence of carditis on admission. Apparently, then, the usual inflammatory reactions have been modified in some way by the salicylates. This was the preliminary report. In December 1943, Coburn made his second report with some further studies on the handling of salicylate in the body. Utilizing a method of determining the blood salicylate developed by Brodie and others,[2] he found that he could vary the plasma level of salicylate according to the dosage given. He would obtain a level of 88 gamma if 2.6 Gm. of salicylate were given over the twenty-four-hour period, whereas if 10 Gm. were given, concentrations varying from 368 to 464 gamma could be obtained. He found that he could produce peak levels if 20 Gm. of salicylate were given daily and maintained with 10 Gm. daily thereafter; that

if therapy were stopped there occurred a rapid fall in the plasma level within twenty-four hours, so that none was present in the blood stream after forty-eight hours. There was some variance with body weight. He found that if an oral dose of salicylate was given, the peak level would be obtained at the end of five hours, whereas if it were given intravenously, the peak level would be obtained at the end of the infusion. Most importantly, he found that after peak levels were obtained they could be maintained with oral therapy.

Restudying a group of cases, he found that as soon as the plasma level hit 368 gamma, or above, the sedimentation rate fell within a six-day period and continued to fall as long as the level was maintained and that all sedimentation rates became normal within fourteen days or less. The clinical appearance, I might add, in these patients closely followed the descent of the sedimentation rate. In 1 or 2 cases it was necessary to withdraw salicylates because of toxic symptoms with psychosis. Within two days the plasma level was gone, psychosis had disappeared, but the patient developed a severe exacerbation of rheumatic manifestations. He reports in this second work some 58 total cases now treated with the salicylate routine. Briefly the proposed routine was as follows: On *day 1*, 10 Gm. of sodium salicylate in 1000 cc. of physiologic saline is administered by intravenous drip in four to six hours. *Day 2*, if the patient has had any rheumatic symptoms or if the temperature is not yet normal, 20 grams of sodium salicylate in 2000 cc. of saline are administered in an eight-hour period. On *day 3*, the same dosage is repeated, if necessary, but if the patient is symptom free, 10 Gm. are considered adequate. On *days 4 to 6*, infusions of 10 Gm. daily are given until the sedimentation rate shows an appreciable drop, that is, a drop of some 20 per cent. *Days 7 to 30*, oral therapy replaces intravenous therapy and doses of 1.6 Gm. of sodium salicylate along with 0.6 Gm. of sodium bicarbonate are administered every four hours day and night. At *day 30*, the patient is allowed a trial week without salicylates. If he is symptom free and his sedimentation rate is normal, he is allowed up progressively. If he develops symptoms, fever or rise in the sedimentation rate during this week period, another two-week course of therapy is indicated, either oral or intravenous. I cannot give any personal testimony to this routine, with the exception of 7 cases we have now tried on our service at Southwestern Medical College. Only 2 of these cases have thus far responded in routine fashion as those described by Coburn. One patient, however, who entered in beginning congestive failure with severe carditis, progressed inexorably to fatal issue, despite adherence to the Coburn routine. As to any theory as to how the salicylate works, I might say that Coburn and Kapp[9] believe it is the serum globulin which gives rise to the accelerated rate of sedimentation and that the inflammatory reaction produced by the antigen-antibody precipitation induces the elaboration of globulin.

A negative word should be said about the use of sulfonamides in the treatment of active rheumatic fever or chorea. As early as 1938, Massell and Jones,[12] Coburn, Swift and others[19] reported series of acute rheumatic fever treated with sulfanilamide. Without exception, all groups of investigators found that not only were cases not helped, but almost invariably the rheumatic fever was intensified and that toxic reactions occurred in a much larger group of cases than occurred in the usual use of sulfonamides in general infections; particularly was this true as regards fever, skin manifestations and anemia.

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REFERENCES

1. Boisvert, P. L.: Streptococcal Antifibrinolysin Test in Clinical Use, J. Clin. Investigation 19:65-74 (Jan.) 1940.
2. Brodie, B., Udenfriend, S., and Coburn, A. F.: The Determination of Salicylic Acid in Plasma, J. Pharmacol. & Exper. Therapy 80:114-117 (Jan.) 1944.
3. Coburn, A. F.: Factor of Infection in the Rheumatic State, Baltimore, Williams & Wilkins Company, 1931.
4. Coburn, A. F., & Pauli, R. H.: Studies on Relationship of Streptococcus Hemolyticus to Rheumatic Process; Observations on Immunologic Responses of Rheumatic Subjects to Hemolytic Streptococcus, J. Exper. Med. 56:651-678 (Nov.) 1932.
5. Coburn, A. F., and Moore, L. V.: A Follow-Up Report on Rheumatic Subjects Treated with Sulfanilamide, J. A. M. A. 117: 176 (July 19) 1941.
6. Coburn, A. F., and Moore, L. V.: Salicylate Prophylaxis in Rheumatic Fever, J. Pediat. 21:180 (Aug.) 1942.
7. Coburn, A. F.: Management of Navy Personnel with Rheumatic Fever. II. U. S. Naval M. Bull. 41:1324-1328 (Sept.) 1943.
8. Coburn, A. F.: Salicylate Therapy in Rheumatic Fever; A Rational Technique, Bull. Johns Hopkins Hosp. 73:435 (Dec.) 1943.
9. Coburn, A. F., and Kapp., E. M.: Observations on Development of High Blood Sedimentation Rate in Rheumatic Carditis, J. Clin. Investigation 15:715-723 (Nov.) 1936.
10. Klieneberger, E.: Natural Occurrence of Pleuropneumonia-Like Organisms in Apparent Symbiosis with Streptobacillus Moniliformis, J. Path. & Bact. 40:93-105 (Jan.) 1935.
11. Klinge, F.: Ergebnisse der Allgemeiner Pathologie und Pathologischen Anatomie des Menschen und der Tierre, München, J. F. Bergman, 1933.
12. Massell, B. F., and Jones, T. D.: Effect of Sulfanilamide on Rheumatic Fever and Chorea, New England J. Med. 218:876 (May 26) 1938.
13. Mote, J. R., and Jones, T. D.: Studies on Hemolytic Streptococcal Antibodies in Control Group, Rheumatic Fever, and Rheumatoid Arthritis; Incidence of Antistreptolysin "O", Antifibrinolysin and Hemolytic Streptococcal Antibodies in Sera of Urban Control Groups, J. Immunol. 41:35-60 (May) 1941.
14. Paul, J. R.: Epidemiology of Rheumatic Fever, Am. J. Pub. Health 31:611-618 (June) 1941.
15. Poynton, F. J., and Paine, A.: The Etiology of Rheumatic Fever, Lancet 2:861, 932, 1306, 1900.
16. Sabin, A. B., and Johnson, B.: Pathogenic Pleuropneumonia-Like Microörganisms in Tissues of Normal Mice and Isolation of New Immunological Types, Proc. Soc. Exper. Biol. & Med. 44:569-571 (June) 1940.
17. Schlesinger, B.: Public Health Aspects of Heart Disease in Childhood (Milroy Lecture) Lancet 1:649 (March 19) 1938.
18. Swift, H. F., and Brown, T. M.: Pathogenic Pleuropneumonia-Like Microörganisms from Acute Rheumatic Exudates and Tissues, Science 89:271-272 (March 24) 1939.
19. Swift, H. F., Moen, J. K., and Hirst, G. K.: The Action of Sulfanilamide in Rheumatic Fever, J. A. M. A. 110:426-434 (Feb. 5) 1938.
20. Thomas, C. B.: The Prophylactic Treatment of Rheumatic Fever by Sulfanilamide, Bull. New York Acad. Med. 18:508-526 (Aug.) 1942.

FIBROSIS OF THE PANCREAS AND ITS RELATION TO CHRONIC NUTRITIONAL DISTURBANCE AND PANCREATIC ACHYLIA

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The purpose of this paper is to call attention to a form of chronic nutritional disturbance of infancy and childhood which dates from birth, is usually complicated by upper respiratory infection, is sometimes familial,[8] and almost uniformly fatal. This condition has been referred to as congenital steatorrhea, cystic fibrosis of the pancreas, and simply fibrosis of the pancreas. Some of the patients, possibly about 20 per cent, present a clinical picture which is typical of the celiac syndrome including wasting, especially of the limbs and buttocks; distention of the abdomen; bulky, foul, light colored stools which contain excess fat; and retardation of growth. The majority of patients with pancreatic disease do not show the celiac picture, however, and in many of them the bronchial cough and symptoms of upper respiratory obstruction completely obscure the relatively slight abnormality of the stools which they present. This point is well illustrated in the case reports which follow. I now wish to present 2 cases occurring in the same family, the second of which was diagnosed clinically; and the first in retrospect after a review of the autopsy report.

REPORT OF CASES

Case 1.—R. M. H., a 9 day old white male child was first seen on August 28, 1939, because of frequent watery stools since birth. He was breast fed and fairly contented, but weighed only six pounds five ounces, or ten ounces below birth weight. Both parents were well and there was no family history of tuberculosis or syphilis, but the father had allergic rhinitis and was said to have had prolonged feeding difficulty in early infancy. The birth and immediate post natal period had been uneventful. On physical examination the infant was alert and active, but was not well nourished, showing very little subcutaneous fat. There were no other important findings.

At seventeen days of age, as he had still failed to gain, a supplemental formula of evaporated milk and karo was started. Ten days later, after some gain in weight, and some improvement in the stools, he was completely weaned. From four to ten weeks of age his caloric intake was pushed up to between seventy and eighty calories per pound of body weight, but in spite of good appetite and the absence of vomiting or diarrhea, the weight gain was still not over two or three ounces per week, and birth weight was not regained until five weeks of age.

At ten weeks of age he suffered a mild nasopharyngitis from which recovery was rapid. At fifteen weeks solid foods were introduced. At sixteen weeks a more severe respiratory infection appeared with a temperature of 101 F. and a harsh croupy or brassy cough which never left him. This was diagnosed acute laryngo-tracheitis at the time, and he was treated with neoprontosil and ipecac. From this time on there was a progressive loss of appetite, and consequent reduction in caloric intake which was not improved by intensive vitamin therapy or by the introduction of various solid foods.

At the age of twenty-five weeks his weight became almost stationary at about 13½ pounds. The cough persisted and was accompanied by rhinitis and nasal obstruction. At eight months of age he was still no better and by this time the parents were almost frantic. It was decided in consultation to refer him to the University of Kansas Hospital which was near the mother's original home.

Laboratory Data.—The hemoglobin was 10.8 to 11.3 Gm.; red blood cells 4,500,000; white blood cells 22,000; Wassermann negative; tuberculin patch test positive; and tuberculin intracutaneous test negative. Roentgenograms of the chest showed considerable peri-hilar infiltration on both sides.

Clinical Diagnosis—Malnutrition, laryngo-tracheobronchitis, and possibly tuberculosis of the tracheobronchial lymph nodes.

At the Kansas City Hospital the course was better for about ten days. After this the respiratory symptoms and fever increased; the stridor became severe, bronchoscopy was performed without benefit, and he finally died on July 13, 1940, at 10½ months of age.

A complete autopsy revealed no evidence of tuberculosis. The main findings were in the lungs and in the pancreas. There was a generalized pneumonic infiltration with dilated and pus-filled bronchioles. The pancreas showed a general increase in connective tissue with dilatation and atrophy of the ducts and acini. The significance of the pancreatic changes was not appreciated at the time.

Case 2.—J. H. This eleven weeks old brother of the patient in case 1 was seen on October 21, 1941, with the complaint of slow weight gain since birth, plus snuffles since five weeks of age, and nasal obstruction of two days duration. The family history was unchanged except for x-ray evidence of old healed tuberculosis in the father. The birth was normal and the baby apparently well. At two days of age a cystic, freely movable, non-tender mass was discovered in the left lower abdominal quadrant. This slowly disappeared over a period of two months. He was breast fed for one week, but the stools were thin and watery. Modified evaporated milk was introduced and the stools became normal, but weight loss continued, and birth weight was not regained until almost six weeks of age. The average gain thereafter was not more than about four or five ounces per week without vomiting or diarrhea; but he had at times passed a thin oily fluid along with the firm stools. Physical examination revealed a thin, wiry, malnourished baby strikingly similar in appearance to the brother. He had loud snuffles and a foamy, purulent nasal discharge. The history of steatorrhea, and a review of the autopsy report on the brother led to a diagnosis of fibrosis of the pancreas at this time, and the brother was, of course, included in the diagnosis.

The patient was then put on fat free lactic acid milk modified with dextrose, and the nose was treated locally with drops and by x-rays. There was some improvement in the nose during the next five weeks, but he gained only thirteen ounces during this time, and, arrangements having been completed, he was sent to the St. Louis Children's Hospital for further study and treatment.

Laboratory Data—Hemoglobin 11.3 Gm.; white blood cells 12,000; nasal smear, numerous pus cells and staphylococci; Wassermann negative; and tuberculin patch test negative.

Clinical Diagnosis—Malnutrition, purulent sinusitis, fibrosis of the pancreas.

On arrival in St. Louis the patient had fever, dysp-

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nea, and rales in the chest. He was treated with frequent intravenous infusions of whole blood, blood plasma, dextrose, vitamins and Amigen (casein hydrolysate composed mainly of amino acids). After some improvement adenoidectomy was performed without untoward results. A vitamin A absorption test revealed almost no rise in carotenoids or vitamin A. After about two months in the hospital, and with fairly continuous gain in weight he again developed fever, dyspnea, and weight loss with a more or less continuous downhill course during the next two months. In spite of chemotherapy, blood, and various supportive measures he finally died on April 9, 1942, at eight months of age. Staphylococci were repeatedly isolated from the nose and throat.

A complete postmortem examination was performed. The significant findings were those of bronchopneumonia and purulent bronchiolitis, with three small calcified areas in the pericolic fat adjacent to the sigmoid; and atrophy, dilatation, and fibrosis of the smaller ducts and acini of the pancreas.

DIFFERENTIAL DIAGNOSIS

I should like to emphasize strongly that pancreatic fibrosis should be suspected in an infant who, in spite of good care and adequate caloric intake, and without obvious cause, fails to gain weight from birth, and especially if during the first few months of life he develops chronic and intractable upper respiratory obstruction and cough. Oily or fatty stools may or may not be present and the characteristic celiac picture of wasting; large, pale, foul, stools; distension of the abdomen; clumping of barium in the small intestine; and a flat glucose tolerance curve are probably present in only about one out of five cases. It should be pointed out that besides idiopathic celiac disease and pancreatic disease the celiac syndrome may be found as a result of chronic infections, dysentery, tuberculous peritonitis, tuberculous mesenteric adenitis, syphilis, parasitic infestations, megacolon, and anomalies of the small intestine. The respiratory symptoms have already been mentioned and these sometimes, although not always, precede any intestinal symptoms or the failure to gain weight. Sooner or later a productive cough and signs of pulmonary infiltration are sure to appear. Vomiting has not been a persistent or frequent symptom. Diarrhea is more often reported, and is occasionally both severe and prolonged.

As has been previously shown by Anderson[1] and more recently by Farber and his associates[4] the diagnosis can be readily and accurately confirmed by analysis of the duodenal contents. Farber's results in over 150 determinations of pancreatic enzyme activity in the duodenal contents of infants and children show such uniformly low values in cases of proven pancreatic fibrosis that there is no possibility of confusion in the interpretation of results. For instance, the values for trypsin in normal patients and those with idiopathic celiac disease or other chronic nutritional disturbances were never below 100 units per cubic centimeter and seldom much below 200 units per cubic centimeter, while the values in pancreatic fibrosis ranged from zero to 26.6 units per cubic centimeter. The values for lipase and amylase were correspondingly low. In patients with pancreatic fibrosis it was also noted that the volume of the duodenal contents were very low for the age of the patient in each case, and that the thick sticky material obtained from the duodenum of patients with pancreatic fibrosis was strikingly different from the thin watery contents obtained from all other individuals studied.

"Thus it has been shown that the determination of pancreatic enzyme activity in the duodenal contents permits accurate differentiation of that form of the celiac syndrome caused by pancreatic fibrosis from all other forms of the celiac syndrome; and also furnishes a means of determining the presence of pancreatic fibrosis in patients who suffer from malnutrition and respiratory disease, but who do not present the celiac picture."[4]

PATHOLOGIC CHANGES

This condition was first recognized by the unusual appearance of the pancreas in routine postmortem examinations. On gross examination the transverse diameter of the pancreas is decreased, the organ is extremely firm and there is considerable resistance to cutting. Microscopic examination reveals severe distortion of the architecture. The acini and small ducts are greatly dilated, and their epithelium flattened or obliterated. The lumina are filled with inspissated material. In the advanced stages there is atrophy of acini and ducts and replacement of these by large areas of fibrous tissue. The islet tissue is not greatly affected. Evidences of congenital anomaly or gross obstruction of the major ducts have not been found. Blackfan and Wolbach[2] offered the possible explanation that the abnormal inspissated secretion was responsible for the distention and atrophy of the ducts and acini.

Blackfan and May[3] reported epithelial metaplasia in various parts of the body as characteristic of vitamin A deficiency in 7 out of 35 cases examined postmortem.

As would be supposed from clinical observation there have been definite changes in the lungs of practically all cases[8] examined at autopsy. These changes are those of interstitial infiltration and marked dilation of the bronchioles and small bronchi. The lumina are filled with purulent material; thus the picture is one of interstitial pneumonia and purulent bronchiolectasis.

METABOLIC STUDIES

Only one rather brief series of metabolic studies has been published, that of Shohl, May and Schwachman.[11] This work indicates

a type of metabolism which is very similar to that of dogs with the pancreatic ducts tied off. It is characterized by feces with a large bulk and high residue. The nitrogen content of the feces is very high, and the fat content is also moderately high, but there are other conditions which affect the fat metabolism more markedly than does pancreatic fibrosis. The dry weight of the feces of pancreatic fibrosis patients on a normal diet is so high, namely above 3 Gm. per kilogram of body weight per day as compared with a value 0.8 to 1.5 Gm. for other patients, that this simple determination alone should be a distinct aid in diagnosis. The high nitrogen content is due mainly to this increased bulk, and not to any great increase in the percentage of nitrogen in the feces. Patients with pancreatic fibrosis fed a diet containing fat and nitrogen but no native protein* showed little improvement in either dry weight, or nitrogen and fat content of the feces. The addition of pancreatin to a diet containing fat and protein was followed by some reduction in the dry weight and nitrogen content, but no change in the fat content of the feces. The dry weight of the feces and the nitrogen content were reduced to within normal limits when a fat free and protein free ration of casein hydrolysate (Amigen) and glucose was used. This was given intravenously in all but one patient, but the results were still good in the one which was given this diet orally.

As to the amount of nitrogen retained this has been shown to vary in proportion to the amount given in both normal individuals, and in patients with pancreatic fibrosis[11] but in the latter excessively high intakes brought about a sharp reduction in the percentage retained; so that there was little profit in going above an average level. There is also a definite indication that the absence of fat in the diet brings about a much greater retention of nitrogen. Positive nitrogen balances, however, have been obtained on various types of diets and the striking feature of this disease is not the poor nitrogen balances, but rather the high nitrogen content of the stools.

As vitamin A absorption is so closely associated with the absorption of fat it would be presumed that the poor absorption of fat in fibrosis of the pancreas would be accompanied by poor absorption of the vitamin. This has been demonstrated by May and McCreary[7] who have shown that these patients exhibit low fasting values of vitamin A in the blood as well as very slight increases above the fasting level after oral administration of test doses of fish liver oil concentrate.

*This was a mixture of 20% casein hydrolysate (Amigen), 42.3% dextrimaltose, 10% starch, 18% olive oil, 3% Brewers yeast, and 6.7% salts. The Mead Johnson product "Nutramigen" is identical except that corn oil is used in place of olive oil.

TREATMENT

Because of the fatal outcome of pancreatic fibrosis any rational type of treatment would be welcomed. The most logical approach is indicated by the previously quoted metabolic studies. These unfortunate patients might be improved by a diet which is not beyond their digestive capacity. As even moderate amounts of protein are not digested, and as casein hydrolysate is utilized in generous amounts, casein hydrolysate (Amigen) and carbohydrate would seem to offer the best dietetic treatment now available. Substitution treatment with pancreatin might be added to this, and if commercial preparations potent in lipase as well as trypsin could be obtained, some sort of fat in moderate amounts might also be utilized. Various vitamins and especially vitamins A and D would have to be administered either enterally or parenterally.

SUMMARY

Two cases of fibrosis of the pancreas in infancy are reported, and the condition is discussed as a possible diagnosis in cases of malnutrition associated with intractable cough and upper respiratory obstruction. The diagnosis by means of the analysis of duodenal contents is pointed out, and the possibility of more effective dietary and substitution therapy is mentioned.

I wish to acknowledge my indebtedness to Dr. Frank C. Neff for the hospital and postmortem data on the first case, to Dr. Alexis F. Hartman for the same material on the second case, and to Dr. Max Woodward for certain data from his office records on both cases reported.

REFERENCES

1. Andersen, D. H.: Cystic Fibrosis of the Pancreas, Vitamin A Deficiency and Bronchiectasis, J. Pediat. 15:763-771 (Dec.) 1939.

2. Blackfan, K. D., and Wolbach, S. B.: Vitamin A Deficiency in Infants: Clinical and Pathologic Study, J. Pediat. 3:679-706 (Nov.) 1933.

3. Blackfan, K. D., and May, C. D.: Inspissation of Secretion, Dilatation of the Ducts and Acini, Atrophy and Fibrosis of the Pancreas in Infants, J. Pediat. 13:627-634 (Nov.) 1938.

4. Farber, S., Shwachman, H., and Maddock, C. L.: Pancreatic Function and Disease in Early Life; Pancreatic Enzyme Activity and Celiac Syndrome, J. Clin. Investigation, 22:827-838 (Nov.) 1943.

5. Maddock, C. L., Farber, S., and Shwachman, H.: Pancreatic Function and Disease in Early Life; Effect of Secretion on Pancreatic Function of Infants and Children, Am. J. Dis. Child. 66:370-375 (Oct.) 1943.

6. May, C. D., and McCreary, J. F.: The Absorption of Vitamin A in Celiac Disease, J. Pediat. 18:200-209 (Feb.) 1941.

7. May, C. D., McCreary, J. F., and Blackfan, K. D.: Notes Concerning the Cause and Treatment of Celiac Disease, J. Pediat. 21:289-305 (Sept.) 1942.

8. Rauch, S., Litvak, A. M., and Steiner, M.: Congenital Familial Steatorrhea with Fibromatosis of the Pancreas and Bronchiolectasis, J. Pediat. 14:462-490 (April) 1939.

9. Shohl, A. T., Butler, A. M., Blackfan, K. D., and MacLachlan, E.: Nitrogen Metabolism during the Oral and Parenteral Administration of the Amino Acids of Hydrolyzed Casein, J. Pediat. 15:469-475 (Oct.) 1939.

10. Shohl, A. T., May, C. D., and Shwachman, H.: Studies of Nitrogen and Fat Metabolism in Infants and Children with Pancreatic Fibrosis, J. Pediat. 23:267-279 (Sept.) 1943.

11. Shwachman, H., Farmer, S., and Maddock, C. L.: Pancreatic Function and Disease in Early Life; Methods of Analyz-

ing Pancreatic Enzyme Activity, Am. J. Dis. Child. 66:418-424 Oct., 1943.

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ABSTRACT OF DISCUSSION

Dr. Max R. Woodward, Sherman: I want to congratulate Dr. Freeman on the presentation of a most interesting and seldom recognized clinical entity. Let me emphasize the fact that he made the diagnosis clinically in the second case after the first case had been missed not only by all of us, but also by the staff of a university hospital who had the benefit of an autopsy report.

I would call especial attention to the problem of recognizing fibrosis of the pancreas as it appears in one's private practice. In this particular case the parents were highly intelligent, willing and anxious to coöperate in every way. I am sure that it is realized how much thought, worry, and diagnostic acumen were utilized during the approximately two years that Dr. Freeman, Dr. Norman and I, as well as the pediatric departments of the University of Kansas and Washington University, labored before and after arriving at this diagnosis. For the benefit of all clinicians, I sincerely hope that this remains a very rare disease.

THE CERVIX THAT WILL NOT DILATE?

JULIUS McIVER, M. D.
DALLAS, TEXAS

On first thought it might seem a waste of time to talk on an age old subject relating to the cervix. Volumes have been written and many heated discussions have arisen over this portion of the anatomy of the female generative organs. It is no wonder that so much consideration has been given this structure; its function is all important. It stands guard during the beginning of the existence of each and every individual for a period of approximately 280 days. During this time nothing must pass through the cervix and at the end of that time it must open for each of us to reach this world in the manner that nature intended.

My reason for choosing this subject was to avail myself of the opportunity to state that I do not believe there is a normal cervix in existence that will not dilate during labor if the patient is made to rest and enough time is taken. The statement continues to be made that "I had a patient whose cervix would not dilate and I had to do a section." All too frequently a patient comes in with a history that with her first baby she had to be delivered by Cesarean section because the cervix would not open. She states that her doctor waited as long as he could but the cervix just would not open, and he had to operate. Along with this statement she begins to tell about having stayed in the hospital three or four weeks, and about blood transfusions, chills, and fever. We all know the story and we all know that a woman who has not had a baby usually has a normal cervix. We all know that if we wait long enough the cervix will dilate and with subsequent deliveries we will not be confronted with this problem—what is best to do for this patient who has had an operative delivery and was infected.

An operation on the uterus followed by infection always leaves doubt as to the quality of the union and a question of how much risk the patient may be subjected to if delivery is attempted through the birth canal. With the second baby it is by no means safe for these patients to have a "trial labor" and it is by no means accurate to predict or diagnose an impending rupture of the uterus in these patients. Then about the only safe procedure for these patients who have been infected following a Cesarean section is to have an elective section at or before the onset of labor, for the simple reason she was not given enough time for the contracting portion of the uterus to do its job.

There are two types of patients who are likely to give concern with regard to cervical dilation: the patient in labor with her first baby and the grande-para. Of course any patient may have a slow first stage labor. The cervix of a patient in labor with her first baby with the vertex presenting will always dilate unless some pathological condition exists. I make this statement out of my own experience in Parkland Hospital. In a period of more than twenty years there has not been a single patient who had Dührssen incision of the cervix and only one patient who had a Cesarean section solely because the cervix would not dilate, and this patient in my opinion did not have sufficient rest nor sufficient time for dilation to occur.

I have no patience with the teaching of the so-called rigid cervix. That there is a wide variation in cervices is well recognized. There is a great variation in the amount and the consistency of the elastic fibers of the skin in all classes of people. We give credit to the dermatologist for this knowledge. There is a marked variation in the striation of the abdomen and breast during pregnancy. There is also marked variation in the behavior of a cervix to infection and its response to treatment. Then why shouldn't it be expected that we encounter a cervix that will not dilate in a given period of time. I like to think of a cervix as I do a rubber band. The ease with which a rubber band stretches depends on the quality of the rubber and its thickness. The dilating of a cervix may be a lot more complicated than the stretching of a rubber band but I think the comparison not out of order.

The most fascinating process I can think of is that of the behaviour of the cervix uteri

Read before the Section on Obstetrics and Gynecology, State Medical Association of Texas, San Antonio, May 3, 1944.

in labor. And how some of them do the "fade away" in so short a time is comparable to the ascension of Elijah to Heaven in a chariot. There are others that take days to dilate, some women staying in labor almost a week and ending up with a perfectly normal baby, who make a speedy recovery from this kind of delivery. Of course a well engaged head that is well flexed has a marked influence on the amount of time needed for the first stage. An excessive amount of amniotic fluid is a handicap to the progress of labor and many times the membranes should be ruptured to rid the uterus of this extra load before the cervix is completely open. Membranes should be ruptured with care always, and especially if the head is not engaged. The greatest danger is prolapse of the cord. It is unfortunate as a rule for membranes to rupture before the onset of labor or early in the process if the patient has a long first stage ahead of her. Yet there are many women in labor three, four or five days with membranes ruptured early and no harm results either to the mother or the baby. If the head is engaged the baby can be delivered through the birth canal. And if there is no excess fluid the patient may remain in labor for a long period of time with perfect safety if rest and food are supplied. It is entirely reasonable to see how excessive fluid may prevent the progress of labor.

It requires some personal contact with the patient and some clinical judgment to know how much medication a patient needs to make her reasonably comfortable. I think it is good teaching to state that if one makes his patient comfortable in the first stage of labor he is an obstetrician, and if not he is a midwife. It is not practical to state the amount of, or which drug to use. Each patient is different, and the same patient is different with every pregnancy and every delivery. The problem is to make the patient reasonably comfortable with whatever drug is selected or the accoucher believes in. So far as I am concerned there is no drug today comparable to morphine for the relief of pain, combined with hyoscine for its amnesic effect. The day may soon come when caudal block anesthesia will be the drug for these patients in the first stage of labor for a long time, but at the present I doubt seriously if it should be given even under the most favorable conditions for as long as two or three days. I think that would be impractical.

It is very important to feed these patients enough food by mouth to keep up energy. Much can be done if a little special attention is given the feeding problem. These patients can be benefited greatly by assuring them they are all right. Even charity patients seen for the first time respond to encouraging statements.

Frequent check of the fetal heart rate is very important. If the heart slows down, the administration of oxygen is indicated. When the heart rate has returned to normal, as it usually does in a few minutes, the oxygen can be discontinued. The administration of oxygen is just as helpful to the patient whose labor is progressing rapidly if the fetal heart rate indicates embarassment to the fetal circulation.

It is a mistake to make too many rectal examinations and a greater mistake to attempt to estimate the rate of progress of labor in the cases of slowly dilating cervices. I am not in accord with the teaching that something should be done if labor comes to a "standstill." I have been told many times that the patient was making no progress with labor—that the cervix was still uneffaced, and that the dilatation was the same as three or four hours previously. Yet this patient delivered unassisted or with low forceps a few hours later, after having a good rest period induced by morphine. It requires better powers of observation and a keener sense of touch than I have ever been able to develop, to be sure that labor has come to a standstill. A good thing to remember is that there are some things more important than immediate delivery of the baby; and one of them, is that no delivery of the baby should be attempted until the cervix is out of the way.

Now the "grandepara" presents a little different consideration. This patient as a rule has a very relaxed abdomen and usually has experienced plenty of hardships. In most of these cases the patient is on charity or at least has had her babies in a charity hospital. She has a history that all her other babies have been born in a reasonably short time but this time for some reason she stays in labor much longer than usual. Women who have had lots of babies are entitled to the most careful examination, vaginally and through the abdomen. A careful appraisal of the entire obstetrical set-up must be made. It has been taken for granted over a long period of time that a woman will deliver unaided just because she has had eight or ten children. This idea is wrong. The "grandepara" gets into trouble far more frequently than the primipara. This fact is just now being recognized. The set-up is different in these patients than with the first or second baby. Here the uterus is hanging forward and the abdominal muscles are relaxed and separated. During a contraction the uterus rises up and the long axis of the baby is directed toward the sacral promontory instead of perpendicu-

lar to the inlet. A buckle binder properly applied and kept that way, is the treatment; plus rest and support with food. The head is likely to be unengaged and in partial extention with some lateral flexion. It may be transverse.

I hear a lot of talk about disproportion in these cases in spite of the fact that a half dozen eight-pound babies have been born to the mother through the birth canal. The patient is sent to the x-ray room to confirm the suspicion that disproportion exists. The radiologist sees a large shadow and tells the obstetrical service that it is his opinion that the head will not enter the pelvis. The story from then on is well known. I am by no means opposed to use of the x-ray. But I am opposed to the teaching that disproportion exists in these cases just because an improperly flexed head with asynclitism casts a shadow so large that it appears at first glance that the head will not enter the pelvis. May I then emphasize the statement that an error in mechanism and not disproportion is the most frequent cause of delay in these "grandepara."

In the cases in which the head is not flexed the cervix may be caught between the head and the symphysis. This condition may cause a prolonged first stage. It should be corrected. If left alone long enough the cervix may remain impinged until it necroses off and the baby may die. To permit that to happen is carrying watchful waiting too far. The multiparous patient in a long first stage of labor warrants careful investigation, with correction of whatever seems to be the trouble. If nothing is wrong, then the patient needs to be made to rest, and waiting is in order.

In the case of "the cervix that will not dilate," the set-up is as follows: The patient comes into the hospital with backache and irregular pains. Everything seems to be perfectly normal. The attending physician is notified or he may have seen the patient in her home. The usual preparation is done by the nurse; then somebody does a rectal examination. About all the information sought is the condition of the cervix and the station of the head. The cervix is closed and thick. The head is high. The contractions continue and the backache becomes more severe.

At the end of eighteen to twenty-four hours the family wants to know when the baby will be here. They wanted to know that in the beginning of pregnancy and at the onset of labor. Frequently several members of the family accompany the patient to the hospital and the grandparents may be in the group of visitors. It is entirely possible that the doctor is anxious to be impressive and when asked about the time of arrival of the baby, makes a prediction of time. Everybody knows that is wrong. Even the doctor knows very well that he doesn't know when that baby will be born. Still an estimated time of the baby's arrival continues to be made. Many times it causes no embarrassment but in the case of a slow dilating cervix it will likely be the undoing of a normal process of labor and result in a delivery through the abdomen.

When this patient has been in labor forty-eight hours not only the expectant father begins to have trouble but other members of the family begin to be disturbed. They hunt up the doctor and want to know what the trouble is. He told them that the baby would be born at a certain time—now a whole day has passed and no baby—what is wrong, doctor? From here on the doctor is on the defensive. The family is asking him if he can't operate; soon he convinces himself that he has at last encountered a cervix that will not dilate; a rigid cervix, if you please, in a perfectly normal woman in labor for the first time. He overlooked making an accurate diagnosis (through the abdomen) of posterior position early in labor when the findings are so dependable. He fails to make this patient comfortable. He left the feeding to the routine procedure. He operates and delivers a nice live baby and everybody is happy. In a few days chills, fever, sulfa drugs, blood transfusions, special nurses and a long stay in the hospital, and with the next pregnancy the problem of what to do. Have I made this ridiculous? If so here are my earnest conclusions:

1. All normal cervices will dilate if given time.

2. Careful attention to rest and supportive treatment with food should be given all patients in a long labor.

3. In the case of the "grandepara", special attention should be given to possible impingment of the cervix under the symphysis.

4. A buckle binder should be used on all patients where the head is unengaged, but more especially on the multipara.

MAXILLO-FACIAL INJURIES

A survey of the North African and Sicilian campaigns showed that of the total admissions to hospitals 0.5 per cent were for maxillo-facial injuries. Of these 42 per cent were battle casualties.

The incidence of maxillo-facial injuries compared to total battle casualties was about 22 per cent. In the cases reported, there were no deaths caused primarily by battle-incurred maxillo-facial injury.—*S. G. O. Notes*, March 31, 1945.

MISCELLANEOUS

COMING MEETINGS AND CLINICS

State Medical Association of Texas. Dr. H. F. Connally, Waco, President; Dr. Holman Taylor, 1404 W. El Paso St., Fort Worth, Secretary.

American Medical Association. Dr. Herman L. Kretschmer, Chicago, President; Dr. Olin West, 535 North Dearborn Street, Chicago, Secretary.

Southern Medical Association. Dr. Edgar G. Ballenger, Atlanta, Ga., President; C. P. Loranz, Empire Building, Birmingham, Alabama, Secretary-Manager.

Southwest Allergy Forum. Dr. Ralph Bowen, Houston, President; Dr. George Owen, 910 North State St., Jackson, Miss., Secretary.

Texas Ophthalmological and Otolaryngological Society, San Antonio, December 7-8. Dr. M. K. McCullough, Dallas, President; Dr. E. D. Dumas, San Antonio, Secretary.

Texas Radiological Society. Dr. Palmer E. Wigby, Houston, President; Dr. Asa Seeds, Dallas, Secretary.

Texas Club of Internists. Dr. Merritt B. Whitten, Dallas, President; Dr. Julian C. Barton, 414 Navarro St., San Antonio, Secretary.

Texas Association of Obstetricians and Gynecologists, San Antonio, fall, 1945. Dr. Allen Stewart, Lubbock, President; Dr. Julius McIver, 1314 Medical Arts Building, Dallas, Secretary.

Texas Pediatric Society. Dr. Frank H. Lancaster, Houston, President; Dr. John Ashby, Dallas, Secretary.

Texas Neuropsychiatric Association. Dr. Titus Harris, Galveston, President; Dr. Fred Rogers, Dallas, Secretary.

Texas Railway and Traumatic Surgical Association. Dr. W. B. Reeves, Greenville, President; Dr. Ross Trigg, First National Bank Building, Fort Worth, Secretary.

Texas Society of Pathologists, Dallas, Jan. 27, 1946. Dr. Paul Brindley, Galveston, President; Dr. John J. Andujar, 1300 W. Cannon Ave., Fort Worth, Secretary.

Texas State Heart Association. Dr. Victor E. Schulze, San Angelo, President; Dr. Walter B. Whiting, Wichita Falls, Secretary.

Texas Dermatological Society. Dr. Lewis Pipkin, San Antonio, President; Dr. Duncan O. Poth, 1230 Nix Professional Building, San Antonio, Secretary.

Texas Surgical Society, San Antonio, October. Dr. Sam Weaver, Dallas, President; Dr. Walter Stuck, 1426 Nix Professional Building, San Antonio, Secretary.

Texas Association of Medical Anesthetists. Dr. E. D. Embree, Houston, President; Dr. R. A. Miller, 1415 Nix Professional Building, San Antonio, Secretary.

Texas Society of Gastro-enterologists and Proctologists. Dr. James J. Gorman, El Paso, President; Dr. George M. Underwood, 4105 Live Oak Street, Dallas, Secretary.

Texas Society for Mental Hygiene. Dr. Charles W. Castner, Capitol Building, Austin, President; Miss Jennie S. Wilmot, University of Texas, Austin, Secretary.

Texas Orthopedic Society. Dr. E. A. Cayo, San Antonio, President; Dr. Edward Smith, Houston, Secretary.

Texas Tuberculosis Association. Dr. J. B. White, Amarillo, President; Miss Pansy Nichols, Austin, Executive Secretary.

Texas Public Health Association. Major Lewis Dodson, C. E., Eighth Service Command, A. S. F. Office, Service Command Engineer, Room 222, Dallas 2, Texas, President; Mr. Alan C. Love, City Hall, Waco, Secretary.

Texas Chapter American College of Chest Physicians. Dr. S. E. Thompson, Kerrville, President; Dr. Elliott Mendenhall, Dallas, Secretary.

Texas Hospital Association. Lawrence Payne, Baylor Hospital, Dallas, President; Miss Madelyne Sturdavant, 5709 Velasco, Dallas, Secretary.

Third, Panhandle, District Medical Society. Dr. D. D. Cross, Lubbock, President; Dr. George Powers, Amarillo, Acting Secretary.

Fourth District Medical Society, Brownwood, 1945. Dr. V. E. Schulze, San Angelo, President; Dr. J. M. Horn, Brownwood, Secretary.

Fifth and Sixth, Southwest District Society. Dr. Phil A. Bleakney, Harlingen, President; Dr. C. W. Tennison, San Antonio, Secretary.

Seventh, Austin District Society. Dr. Joe Gilbert, Austin, President; Dr. A. A. Terry, Austin, Secretary.

Eighth, Ninth and Tenth Districts Medical Society. Dr. J. T. Tadlock, Dayton, President; Dr. George W. Waldron, Medical Arts Building, Houston, Secretary.

Eleventh District Society. Dr. C. E. Willingham, Tyler, President; Dr. F. E. Felder, Palestine, Secretary.

Twelfth, Central Texas, District Society, Marlin, July 10. Dr. C. M. Simpson, Temple, President; Dr. R. J. Hanks, Waco, Secretary.

Thirteenth, Northwestern, District Society. Dr. J. W. Foy, Seymour, President; Dr. Joe R. Wise, 1212 W. Lancaster, Fort Worth, Secretary.

Fourteenth District Society, Dallas. Dr. W. C. Morrow, Greenville, President; Dr. R. S. Usry, 1835 Garrett, Dallas, Secretary.

Fifteenth, Northeast, District Society. Dr. Joe D. Nichols, Atlanta, President; Dr. Henry H. Niehuss, Gladewater, Secretary.

HOSPITALS NEEDING INTERNS AND RESIDENTS

El Paso City County Hospital, El Paso. Capacity 192 beds. George W. Cook, Col., U. S. A. Ret., Superintendent (3 interns Oct. 1, 1945).

Methodist Hospital, Dallas. Capacity 206 beds. C. W. Sensenbach, M. D., Medical Director (1 intern July 1; 3 interns in October).

Nix Hospital, San Antonio. Capacity 145; admissions 5,564. Ellen Louise Brient, R. N., Superintendent (1 intern June 1).

Providence Hospital, Waco. Capacity, 125 adult, 25 bassinets; admissions, 6,500; Sister Mary Vincent, Administrator (1 resident now, $250 per month, plus full maintenance).

St. Paul Hospital, Dallas. Capacity 270 beds. C. W. Sensenbach, M. D., Medical Director (1 intern July 1).

Wichita General Hospital, Wichita Falls, capacity 135; admissions 4,303. Mrs. Margaret Hales Rose, Superintendent (1 resident needed at once. Salary $175.00 and maintenance).

UNIVERSITY OF TEXAS PEDIATRIC FELLOWSHIPS

The Department of Pediatrics of the University of Texas School of Medicine, Galveston, has created temporary special fellowships for physicians of Texas who have recently been released from the Armed Services of the Country.

These fellowships may be in the form of residencies from three to six months in duration, or even longer periods for those wishing to qualify for certification by the American Board of Pediatrics. Arrangements have been made to offer opportunity for investigative work in coöperation with the fundamental science departments of the Medical School for those desiring such types of training. These fellowships have been made possible by a grant from the William Buchanan Foundation of Texarkana to the University of Texas Child Health Program and the recipients will be known as William Buchanan Fellows. It is planned that these fellowships will carry a stipend varying from $900.00 to $2,000.00 per annum, depending upon the specific circumstances in each case.

Any physician interested in applying for these fellowships may write to Dr. Arild E. Hansen, Director of the University of Texas Child Health Program, Department of Pediatrics, School of Medicine, Galveston, Texas.

V-E DAY BRINGS BIGGER TASK FOR ARMY MEDICAL DEPARTMENT

The ending of hostilities in Europe means that the doctors, nurses, technicians and other personnel who comprise the Army Medical Department will now begin an even bigger job than they have been doing, which means there is no immediate prospect for the general release of personnel, Major General Norman T. Kirk, The Surgeon General, declared on V-E Day.

The Medical Department, he pointed out, not only must continue to care for the sick and wounded but must make immediate preparations for the redeployment of troops to the Pacific or this country.

One of the biggest tasks will be to give physical examinations to some 3,500,000 soldiers before they leave Europe. In addition, a goal of 90 days has been set in which to evacuate the sick and wounded

from the European theater to this country. Then there will be the final matter of redeploying the Medical Department personnel and equipment.

Soldiers whose condition necessitates a medical discharge will be given further treatment and necessary examinations in the United States. All soldiers, prior to discharge from the service, will be screened for tuberculosis, syphilis and other diseases, and for possible strains and other physical defects. Thus hospitals here will probably be operating at capacity with a critical need for medical personnel for many months to come.

"Practically all officers and men in the Medical Department came in for the emergency," said the Surgeon General, "and so far as we are concerned the emergency is far from being over."—S. G. O. News Notes, May 15, 1945.

STATE BOARD OF MEDICAL EXAMINERS EXAMINATIONS

The Texas State Board of Medical Examiners will conduct an Examination Session on July 17, 18, and 19, at the Rice Hotel, Houston, according to Dr. T. J. Crowe, Secretary of the Board, Texas Bank Building, Dallas. Physicians who are interested in securing a license to practice medicine in Texas should at once communicate with the secretary at the address given.

"FAITH AND GUTS"

From the 100th Division in France has come a story of the "faith and guts" of two medical officers and an aid man. Twice one night the aid man, Pfc. Julius Shocko, of Charlevoix, Mich., had attempted to reach a casualty, but German machine gun fire raked the intervening terrain. Later Chocko was joined by Captain James F. X. O'Rourke, MC, of New York City, Battalion Surgeon, and 1st Lieutenant Leonard E. Coplen, MAC, of Newton, Mass. The three boldly walked out in the daylight and covered 300 yards under German observation while the men in foxholes held their breath. At the edge of some woods they were stopped by a German gunner: "We are from the Medical Corps and we have come for the wounded man," they told him. After a short wait several Germans appeared carrying the body of the man they had sought to rescue. "You have great courage," said one of the Germans as the medical men started back with their burden.—*S. G. O. Notes*, March 31, 1945.

TRENCH FOOT AMONG SOLDIERS

Trench foot has become a common ailment among soldiers who are in service abroad. What is it? Is it serious? Is it contagious?

"Trench foot is a condition of the feet caused by prolonged periods of exposure to wet and cold," says *Hygeia, The Health Magazine*. "As the name indicates, it is often seen in soldiers who have had to walk or stand in mud and water in cold weather. In its milder forms the condition resembles frostbite of the feet. In its more serious forms the condition may lead to varying degrees of gangrene of the affected foot. The condition is not contagious. Even mild stages of this condition require rather long periods of hospitalization to effect a cure.

WAR EDEMA

An opportunity to study the problems of famine or war edema is afforded in the rehabilitation of European countries, *The Journal of the American Medical Association* observes in its May 19 issue. This edema is one of the results of starvation. It is manifested by excessive accumulation of fluid in tissues, with swelling usually in the legs and is widespread during war and famine. Until recently, *The Journal* says, biochemical and nutritional knowledge has been inadequate in determining a more specific cause than nutritional deficiency. The efficacy of high protein foods is generally acknowledged as causing the edema to disappear. The lowered serum proteins present in this disorder indicate a depletion of protein reserves of the body which must be restored before cure can be effected. *The Journal* points out that results so far in trying to relieve nutritional edema by administration of B complex vitamins are conflicting, and the preponderance of evidence points to the dominant role of protein in the causation of this type of edema.

MISINTERPRETATION PLACED ON COUNCIL ACTION ON MARGARINE

"Misinterpretation is being placed on the action of the Council on Foods and Nutrition in withdrawing acceptance from individual brands of oleomargine," *The Journal of the American Medical Association* for May 12 states editorially.

"Reports published in the periodicals devoted to the interests of the dairy industry and comment stimulated in the public press falsely attribute this action to a lack of confidence in the nutritional value of margarine," the editorial says, adding: "Such is not the case."

At one time the brands of margarine fortified with vitamin A carried on the labels the seal of acceptance of the Council on Foods and Nutrition of the American Medical Association, indicating the accepted nutritional value of the product. Then, in July 1943, the Council voted to restrict its scope primarily to those "special purpose" foods which have a definite relation to specific medical and health problems. Because of this action, the seal was no longer authorized on general purpose foods, including margarine.

Commenting on the Council's action at that time, the editorial says:

"Confidence in the nutritional value of margarine fortified with vitamin A was reaffirmed by the Council at the time acceptance was withdrawn. The attempts of those opposing margarine to cast doubt and suspicion on its food value as a result of the withdrawal of acceptance by the Council are unwarranted and misleading."

CAUTION PUBLIC AGAINST CANCER

"When everyone understands and acts on certain facts regarding cancer, this dread disease may be greatly reduced," says W. W. Bauer, M. D., Director of the Bureau of Health Education of the American Medical Association, in the May issue of *Hygeia, the Health Magazine*. Continuing he said:

"First is the knowledge that cancer is often curable in early stages of the disease. Regular medical examinations twice yearly is a sensible precaution. Symptoms which should be regarded with suspicion fall into these main classes: abnormal bleeding from any body opening; persistent stomach upset or bowel irregularity; lumps in the tissue of the breast; sores which refuse to heal; and warts or moles which grow or change in appearance."

EVALUATION OF POLIOMYELITIS THERAPY

Evaluation of the various forms of treatment of infantile paralysis is of great importance in determining the procedures to be recommended when an epidemic strikes, emphasizes a special committee appointed by the Scientific Advisory Board of the National Foundation for Infantile Paralysis in *The Journal of the American Medical Association* for May 5.

Commenting on the report by the committee, *The Journal* says editorially that "the amount of damage done to the nervous system primarily and to the muscles secondarily in this disease varies from one

epidemic to another. Certainly mortality rates vary in different epidemics. Even the portions of the body that are primarily affected seem to differ; respiratory paralysis is much more frequent during some outbreaks than during others. The ultimate damage seems to vary according to the methods of treatment followed, yet assessment of both the immediate and the ultimate disability is exceedingly difficult.

TUBERCULOSIS REMEDY RUMOR SPIKED

Many letters have been addressed to the American Medical Association by people who think that a remedy has been found for tuberculosis. "Unfortunately," *The Journal of the American Medical Association* for May 5 points out editorially, "the columnist Ed Sullivan, in his syndicated column not long ago, made this statement: 'To tuberculosis patients: Contact American Medical Journal on Dr. Asheshov's Western Ontario U. experiments'."

The article that occasioned this notice appeared in Science for Feb. 2, 1945 by Igor Asheshov and Frieda Strelitz. "In this article," *The Journal* explains, "the authors report experiments performed at the University of Western Ontario, London, Canada, with a fungus known as Aspergillus fumigatus." Crude preparations with substances derived from the growth of this fungus indicate, according to the authors, that: (1) they possess a high degree of activity against staphylococci bacteria; (2) their power to arrest the growth of a certain strain of tuberculosis bacteria is higher than their action against staphylococci. "Certainly," *The Journal* says, "this work is hardly sufficiently advanced even to suggest that any of these substances are effective in the treatment of tuberculosis. . . ."

HARMON GENERAL HOSPITAL, LONGVIEW, TROPICAL DISEASE CENTER

Harmon General Hospital at Longview, Texas, has been designated for the treatment of tropical diseases. The only other Army tropical disease center is Moore General Hospital at Swannanoa, N. C.

The medical staff of Harmon General Hospital has for some time been engaged in a study of relapsing malaria which has resulted in a permanent contribution to the knowledge of the disease, according to Lieutenant Colonel Francis R. Dieuaide, MC, Chief of the Tropical Disease Branch, Medical Consultants Division, Office of the Surgeon General. This study is now being extended to other tropical diseases which are rare in this country, such as filariasis, schistosomiasis and dysentery.

The Commanding Officer of Harmon General Hospital is Colonel Gouverneur V. Emerson, MC. Lieutenant Colonel Worth B. Daniels, MC, is Chief of the Medical Service and Lieutenant Colonel Stuart W. Lippencott, MC, is Chief of the Laboratory Division. *S. G. O. Notes*, April 15, 1945.

STREPTOMYCIN IN TYPHOID FEVER

A promising new drug, related to penicillin in its germ-killing power, has been found useful in the treatment of typhoid—a disease for which heretofore there has not been a treatment of any value, it is reported in *The Journal of the American Medical Association* for May 19.

Hobart A. Reimann, M. D., William F. Elias, Ph. D., and Alison H. Price, M. D., Philadelphia, studied effects of the drug during a local typhoid epidemic in December 1944. About 60 cases with 8 deaths were reported during the epidemic, all of them arising from a typhoid carrier in a bakery. Because amounts of the drug were limited, only 5 patients were selected for treatment and study.

The drug, streptomycin, is a nontoxic substance which, like penicillin, has an inhibiting or destroying action upon bacterial growth. It acts, however, upon some disease producing bacilli on which penicillin has no effect, including Eberthella typhosa, the microbe which causes typhoid.

Of the 5 patients treated by hypodermic injection with streptomycin, recovery took place in 3 during treatment. The authors point out that different strains of this germ vary in their resistance to streptomycin. This may explain why not all of the patients responded to the new treatment.

DDT STUDIED FOR OUTDOOR USE

Extensive investigations are now being conducted to determine the benefits and possible hazards involved in the contemplated use of the insecticide DDT on a large scale outdoors as part of a plan to control insect-borne diseases.

In the Pacific Theatre, DDT proved highly valuable in bringing insect-borne diseases under control. However DDT will not be employed indiscriminately in this country until more research work has been completed on the general biological effects of this insecticide.

Besides killing insects that carry diseases, DDT may kill other insects that are beneficial—and thus affect the balance of nature which is important to agriculture and wild life. In combat zones, where the health of the soldier was at stake, it was necessary to ignore these considerations but in the United States general outdoor applications will not be adopted until more is known about these biological effects.—S. G. O. News Notes, May 15, 1945.

NEW METHOD OF TREATING MIGRAINE

A new method for the treatment of migraine headaches by injections of a substance known as histamine is suggested from preliminary observations reported in *The Journal of the American Medical Association* for May 19.

Stuyvesant Butler, M. D., and William A. Thomas, M. D., of Chicago, who make the report, state that 34 patients with severe migraine were treated with histamine injected into a vein. Investigators had previously reported the administration of histamine by injection into a muscle without outstanding success.. Dr. Butler and Dr. Thomas chose patients who could not conceivably have headaches from any other cause, such as sinusitis, eye-strain, neuralgia of the face or scalp, skull injury or brain tumors. Of the 34 patients, 24 became symptom free and 7 were improved.

The doctors caution, however, against the indiscriminate use of histamine. It is particularly dangerous if given to patients with peptic ulcer or high blood pressure.

One patient, a woman aged 32, suffered from very severe headaches, during which her speech was indistinct. Morphine injections often gave no relief. She was given three injections of histamine into a vein. Mild headache and heartburn was experienced during the first injection. She has had no return of headache for fourteen months.

It is universally agreed that patients who have been dismissed from tuberculosis sanatoria should receive the benefit of continued medical supervision. Tuberculosis is a treacherous disease. Even arrested pulmonary tuberculosis may break down when the patient returns to the customary activity of civilian life. Occasionally, extrapulmonary tuberculosis will become manifest after the patient leaves the sanatorium. It is very important that the dismissed patient present himself for periodic examination. By doing so he not only safeguards his own health and security, but he may also prevent the dissemination of tuberculosis among his family and other persons.—*A. M. Olsen, M. D., Mayo Clinic, Rochester, Minn.*

LIBRARY NOTES

The package library consists of collections of reprints and other periodical material on various subjects, prepared for lending to members of the Association. Requests for packages should be addressed "Library, State Medical Association of Texas, 1404 W. El Paso Street, Fort Worth 3, Texas." Twenty-five cents in stamps should be enclosed with the request to cover postage and part of the expense of collecting the material. Only one package may be borrowed at a time, and packages are allowed to remain in the hands of the borrower for 14 days.

Package Service

Packages were mailed from the Library of the State Medical Association to the following during May:

Francis Powell, Weslaco—*Medicine, socialized* (29 articles).

Dr. R. L. Marshall, Tyler—*Thyroid, hyperthyroidism* (7 articles).

Mrs. R. Q. Martin, San Angelo—*Oxyuriasis* (16 articles).

Dr. J. S. McCelvey, Temple—*Lungs, cancer* (25 articles).

Dr. Ilse Mannheimer, Seguin—*Sterility* (21 articles).

Dr. Chas. B. Reed, Clarksville—*Kidneys, calculi* (11 articles).

Southwestern Medical College, Dallas—(1 journal).

McCloskey General Hospital, Temple—(2 journals).

Dr. A. O. McCary, Freeport—*Gonococci, culture* (21 articles).

Dr. Ottis Walker, Mission—*Anesthesia, procaine and procaine compounds* (11 articles).

Dr. M. L. Stubblefield, Baird—*Hospitals, administration and organization* (13 articles).

Capt. Fred A. Turner, Sheppard Field—*Penicillin, therapy* (3 articles).

Dr. W. E. Douthit, Cuero—*Fistula, bronchial* (17 articles).

Major David A. Nathan, Camp Maxey—(5 journals).

Dr. B. A. Kirkpatrick, Taylor—*Infants, premature* (23 articles).

Dr. A. Philo Howard, Houston—*Sulfonamides* (10 articles).

Dr. D. K. Robison, Rock Springs—*Arthritis* (24 articles).

Dr. W. E. Crump, Wichita Falls—*Sulfonamides* (7 articles).

Lt. E. E. Miller, Beeville—*Rh Factor* (14 articles).

Dr. G. H. Hampshire, Marlin—*Genitals, cancer* (22 articles).

Dr. Vernon A. Black, Wharton—(2 journals).

Ashburn General Hospital, McKinney—(5 journals).

Dr. D. R. Foster, Itasca—*Fractures, therapy* (9 articles).

Dr. W. D. Blasingame, Denison—*Sprains, therapy* (4 articles).

Dr. B. M. Works, Brownsville—(1 book).

Mrs. J. R. Maxfield, Dallas—(1 journal).

Dr. P. C. Pedigo, Strawn—*Burns, therapy* (11 articles.

Dr. Beatrice Hawkins, Brownsville—(4 journals).

Accessions

Philadelphia, W. B. Saunders Company—Herrell: Penicillin and other Antibiotic Agents; Wohl: Dietotherapy, Clinical Applications of Modern Nutrition.

Baltimore, Charles C. Thomas—Unger: Bronchial Asthma; Moseley: Shoulder Lesions; Osborne and Holmquest; Technic of Electrotherapy; Carter: The Fundamentals of Electrocardiographic Interpretation; Ford: Diseases of the Nervous System; Files: Medical Radiographic Technic.

Columbus, Ohio, B. B. Printing Company—Brown: Technical Methods for the Technician.

Summary

Reprints received, 663	Local users, 32
Journals received, 198	Borrowers by mail, 28
Items consulted, 289	Packages mailed, 30
Items taken out, 127	Items mailed, 319

Total items consulted and loaned, 735

MOTION PICTURE LENDING LIBRARY

Motion picture films on medical subjects, 16 mm., both silent and sound, some in color, and suitable for either medical or lay audiences, are available for loan to county medical societies, hospital staffs, or individual physicians, on request. Borrowers will be required to pay only the cost of shipment of the films, by express, with insurance, and for any damage to films while in the hands of the borrower.

Requests for films should be addressed to "Motion Picture Lending Library, State Medical Association of Texas, 1404 West El Paso Street, Fort Worth 3, Texas." A list of available films, with descriptions, will be furnished on request.

The following motion picture films were loaned by the Motion Picture Lending Library of the State Medical Association during May:

Appendicitis in Childhood (Available through the courtesy of Mead Johnson and Company) Angelina County Medical Society, Lufkin.

Bleeding Tendency (Available through the courtesy of Mead Johnson and Company) Hill County Medical Society, Hillsboro.

Health is a Victory (Available through the courtesy of the American Social Hygiene Association) Colored Y. W. C. A. and colored Y. M. C. A., Beaumont.

Malaria, Rusk County Medical Society, Henderson.

Modern Nutrition (Available through the courtesy of E. R. Squibb & Sons) Nurses and Nurses' Aids, McAllen and Edinburg.

Plain Facts (Available through the courtesy of the American Social Hygiene Association) Colored Y. W. C. A. and colored Y. M. C. A., Beaumont.

Sulfonamide Therapy (Available through the courtesy of Lederle Laboratories, Inc.) Hill County Medical Society, Hillsboro.

Tuberculosis, Diagnostic Procedure in (Available through the courtesy of the Texas Tuberculosis Association) Hill County Medical Society, Hillsboro.

Vitamins and Some Deficiency Diseases (Available through the courtesy of the Lederle Laboratories, Inc.) Officers of Medical Branch Ashburn General Hospital, McKinney.

NEWS

Dallas Medical Supervisory Council.—Dr. E. H. Cary, president of the Southwestern Medical Foundation, Dallas, announced that an advisory council would be nominated soon to help acquaint the public of the southwest with the program to build a great medical center in Dallas, states the Dallas *News*. Both lay and medical representatives from each county of Texas and from each adjacent state which the medical center proposes to serve, will comprise the council, according to Dr. Cary. The council will hold a series of regional meetings, and members will meet annually in Dallas on the day of graduation of students of Southwestern Medical College.

Dallas Physicians Mexican Guests.—Dr. Arthur Grollman, professor of experimental medicine; Dr. A. I. Folsom, professor of urology, and Dr. Sol Haberman, professor of clinical pathology, members of the faculty or clinical staff of Southwestern Medical College, Dallas, recently flew to Mexico to deliver lectures before the Laguna Medical Association at Torreon and the University of Monterrey, states the Dallas *News*. The lectures were given in Spanish, in response to an invitation extended by Dr. Alberto Madri, member of the American Neurological Association. The purpose of the trip, according to Dr.

Folsom, was not only to promote a better understanding between the medical associations of the two nations, but to accomplish a closer coöperation between Southwestern Medical College and medical education centers of Mexico.

National Physicians Committee Active.—A subcommittee of the National Physicians Committee conferred recently in Dallas with Dr. E. H. Cary, Chairman, reports the Dallas *News*. Included in the group were Dr. William Braasch, Rochester, Minnesota; Dr. Edward Skinner, Kansas City; Dr. George Coleman, Chicago; and John Pratt, executive administrator of the committee. Dr. Cary announced that continued research on public opinion would be carried on in the committee's fight during the coming months against government control of medicine. Through previous research efforts, the committee has ascertained that a vast majority of people are demanding a plan or method for the payment of costs of unusual illnesses and hospitalization. On the basis of data already assembled, it is believed that all medical needs of the public can be met by utilizing to maximum capacity the non-profit, prepayment medical care plans, Blue-Cross, and private insurance carriers, asserted Dr. Cary. It was pointed out that the committee's data indicate that at present 25,000,000 people are receiving protection through such agencies which are extending their benefits each year. A continuance of this process will make it unnecessary for the federal government to undertake the distribution of medical care, announced Dr. Cary. The National Physicians Committee is a nation-wide organization of physicians, independent of the American Medical Association, although its activities are endorsed by that body.

Baylor University Medical School Building Construction may begin soon, it is anticipated by the Baylor Board of Trustees, who have approved plans, according to the Houston *Post*. Final plans and specifications are being drawn for the $1,000,000 building, which will be the first unit in the Houston Medical Center. The proposed building will have a frontage of 476 feet and will be "E" shaped. Construction will be of limestone with marble finish. The main building will be four stories high and the wings three stories. An auditorium will be housed in one wing in the back center of the building. It is anticipated that construction will probably begin as soon after July 1 as priorities are secured. The building is planned to accommodate 320 students and will include the most modern lecture rooms, laboratories, and work shops for research projects. Money for the building is being furnished by the M. D. Anderson Foundation. Baylor Medical School, which moved to Houston in July, 1943, is now located in the old Sears-Roebuck building.

AAF South Central Medical District Meeting.—A two-day conference on internal medicine, neuropsychiatry, and other specialties, was held May 9 and 10 with Bexar County physicians and medical officers from AAF hospitals in Louisiana, Arkansas, Oklahoma, and Texas, in attendance. The conference was held at the San Antonio Aviation Cadet Center's AAF Regional Hospital, with Colonel Paul Holbrook, chief of the division of professional services, office of the air surgeon, in charge, informs the San Antonio *Express*. Colonel Carl S. Williamson, post surgeon and commanding officer of the AAF Regional Hospital, was host, and the program was presented under the direction of Lieut. Col. M. P. Starr, district consultant in internal medicine for the air surgeon, and chief of medical services at the hospital.

Representatives of the University of Texas School of Medicine, Galveston; Southwestern Medical College, Dallas; Rockefeller Institute of Medical Research, and the office of the air surgeon presented the program. Subjects included preventive medicine, antibiotic therapeusis (penicillin), medical aspects of convalescence, and rare cases treated at station hospitals throughout the district.

Southwestern Medical Foundation Public Health Lectures.—A series of health talks are being presented to Dallas laymen by members of the faculty of Southwestern Medical College under the sponsorship of that institution and Parkland Hospital. Dr. Tinsley Harrison, dean, Southwestern Medical College, delivered the first two lectures on the subjects, "Facts and Fancies About Blood Pressure," and "Traffic Jams in the Highways of the Body." Dr. Morton F. Mason delivered lectures on May 13 and 20 on the subjects, "It's a Mistake to Poison Your Mother-in-Law," and "Blood Plasma: Canned Life for Soldier and Civilian." Dr. Donald Slaughter, dean of students, Southwestern Medical College, spoke on "The Magic Sulfa Drugs" and "The Miracle of Penicillin." The final lecture of the series was given by Dr. Charles T. Ashworth on the subject, "In Defense of Ghouls." It was planned to continue the series of talks if there was sufficient interest on the part of the public.—*Dallas News*.

Child Health Conference.—The second annual child health conference under the auspices of the Department of Pediatrics, University of Texas School of Medicine, Galveston, was held recently with pediatricians in attendance from all parts of Texas, and with Army medical officers as special guests. Among those who conducted the clinics at the Conference were Dr. Irvine McQuarrie, professor of pediatrics at the University of Minnesota; Dr. William L. Bradford, associate professor of pediatrics at the University of Rochester Medical School; Dr. Herbert Miller, associate professor of pediatrics at Yale Medical School; and Dr. Wallace Sako, associate professor of pediatrics at Louisiana State University. Members of the clinical staff of the University of Texas School of Medicine participated in the Conference.

U. of T. Medical School News.—The Forty-ninth Legislature recently authorized transfer of the Galveston State Psychopathic Hospital from the State Board of Control to the Board of Regents of the University of Texas, to be operated as a part of the medical branch of the University. The institution which formerly accommodated approximately eighty patients will be re-equipped to care for about 120 mental patients for rapid diagnosis and rapid treatment. Special facilities will be provided for post-graduate training in neuropsychiatry and for psychiatric nurse training. The hospital will not be ready to receive patients until refurnishing and reorganization has been completed. Dr. Jack Ewalt, professor of neuropsychiatry, University of Texas School of Medicine, will serve as director.

Dr. Thurlo B. Thomas of the anatomical laboratory, University of Texas School of Medicine, has received a grant from the National Research Council for the study of alloxan.

Dr. W. H. Moursund, Dean of Baylor University College of Medicine, Houston, will deliver the commencement address at the University of Texas School of Medicine June 2.

Texas Chapter Alpha Omega Alpha Initiation and Banquet.—The University of Texas Medical Branch chapter of Alpha Omega Alpha, will hold its annual initiation and banquet for new members June 1, in Galveston. Brigadier General E. G. Reinhartz, Commandant of the School of Aviation Medicine, Randolph Field, Texas, will be the principal speaker. General Reinhartz will also deliver the annual Alpha Omega Alpha lecture to students of the medical branch in the afternoon of June 1.

The American Board of Obstetrics and Gynecology will conduct general oral and pathology examina-

tions (Part II) for all candidates, at Atlantic City, from June 13 through June 19. The Hotel Shelburne will be headquarters for the Board. Deferment without time penalty is permitted under a waiver of published regulations applying to civilian candidates if a candidate in service finds it impossible to proceed with the examinations of the board. Applications are now being received for 1946 examinations. Further information and application blanks may be obtained by writing to the Secretary, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

American Optical Company Educational Campaign.—Since June, 1942, the American Optical Company has conducted a national educational campaign dedicated to the advancement of professional care. A total of sixty-five messages have been published in four magazines with national circulation—*Life, Saturday Evening Post, Look,* and *Good Housekeeping.* It is estimated that more than 193,000,000 copies of the American Optical educational messages have been circulated throughout the nation. This campaign has been carried on solely to help correct the public misconception of the true relation of glasses to eye care and visual efficiency. The campaign has not advertised ophthalmic products, but has been designed rather to impress upon millions of readers that professional services—not the price of glasses—are the all-important factors in eye care. The campaign will be carried on throughout the year.

Military Personals

Brigadier General William Lee Hart, M. C., Surgeon, Eighth Service Command, Dallas, was recently promoted to that rank from Colonel.

Major Robert C. L. Robertson, of Houston, has been assigned chief of neurosurgery at McGuire General Hospital, Richmond, Va., informs the Fort Worth *Star-Telegram.* Prior to this assignment, Major Robertson served at Brooke General Hospital, Fort Sam Houston.

Lieut. Col. Truman G. Blocker, Jr., of Galveston, former assistant professor of surgery, University of Texas School of Medicine, was recently promoted from the rank of major, advises the Fort Worth *Star-Telegram.*

Recent promotions announced by the Surgeon General's Office are: *Colonel Edwin G. Faber,* M. C., of Tyler, *Colonel Walter H. Moursund, Jr.,* M. C., Dallas, and *Colonel George Sladczyk,* M. C., Port Arthur, all from Lieutenant Colonel; *Lieut. Col. Wendell E. Beall,* M. C., Pearsall; *Lieut. Col. William H. Hargis, Jr.,* M. C., San Antonio; *Lieut. Col. Marvin P. Knight,* M. C., Dallas; *Lieut. Col. Lawrence L. Griffin,* M. C., Galveston, and *Lieut. Col. Abe Hauser,* M. C., Houston, all from Major.

Captain Arthur J. Richardson, Jr., M. C., son of Dr. and Mrs. A. J. Richardson of Jasper, was recently awarded the Bronze Star medal for meritorius achievement in connection with military operations on Leyte, states the Jasper *News Boy.* Captain Richardson received the citation recently while on leave at home. The citation reads in part: ". . . On 23 November 1944, under heavy enemy machine gun and sniper fire, he set up a collecting station which he maintained for a period of two days and nights, treating and evacuating about 150 casualties. Captain Richardson's devotion to duty and courageous leadership were in accord with the highest traditions of the Medical Corps, and reflect great credit upon himself and the military service."

Lieutenant C. A. Dwyer, M. C., U. S. N. R., of Houston, is at home on leave after three years in Bilibid Prison, Manila, informs the Houston *Press.* Lieutenant Dwyer was married April 21 to Virginia Dean, MGM starlet, whom he met four and a half years ago in Hollywood. Lieutenant and Mrs. Dwyer's plans to marry were interrupted when he was ordered to the Philippines.

Captain Logan Mewhinney, M. C., A. U. S., was married May 14 to *Dr. Ruth I. Allen* of Dallas. Captain Mewhinney returned recently from thirty-three months service in the Mediterranean and European theatres.—*Holland Progress.*

Dr. Ralph Liles, of Houston, was recently appointed to the commission of Lieutenant (jg), U. S. N. R., Medical Corps, and was ordered to report to the Naval Receiving Hospital, San Francisco, California, on May 14.

Dr. Matthew Hill Metz of Dallas, was recently tendered a commission in the U. S. Public Health Service, with the rank of surgeon, and was ordered to active duty at Washington, D. C., on May 21.

Dr. E. P. Evans, of Dallas, recently accepted the commission of Lieutenant-Commander, M. C., U. S. N. R., and reported for active duty at the Naval Receiving Hospital, San Francisco, California, on May 25, 1945.

Personals

Dr. M. M. Brown, Mexia, was re-elected president of the Texas State Board of Medical Examiners at the reorganization meeting of the Board recently in Austin. Dr. Brown will serve as president for two years.—*Mexia News.*

Dr. W. H. Moursund, dean of Baylor University College of Medicine, Houston, was elected chairman of the Health Council of the Council of Social Agencies, at a recent meeting of that organization, informs the Houston *Press.*

Dr. J. T. Lawson, of Bowie, was recently appointed a member of the Texas Board of Medical Examiners, advises the Bowie *News.* Dr. Lawson served as a member of the Board from 1936 to 1942. His present appointment is for a term of six years.

Dr. William F. Mengert, of the Southwestern Medical College, Dallas, was elected chairman of the Health Council, Council of Social Agencies, Dallas, informs the Dallas *News.*

Dr. T. M. Collins, Big Spring, was recently honored at a party by Mrs. Collins. commemorating the fiftieth anniversary of his entry into the medical profession, reports the Big Spring *News.*

Dr. B. F. Arnold, Greenville, was recently appointed city health officer of Greenville, advises the Greenville *Herald.*

Dr. Henry A. Petersen, Houston, was recently elected president of the Houston school board, states the Houston *Post.*

Dr. P. C. Nichols, Spur, was re-appointed health officer of that city recently, according to the Texas *Spur.*

Dr. Curtice Rosser, Dallas, chairman of the executive council of the Southern Medical Association, attended a meeting of that council May 21 in Birmingham, Alabama. Dr. Rosser was one of two featured speakers on a "Southern Medical Association Night" program, presented in the evening of May 21 by the Jefferson County Medical Association. Dr. Rosser's subject was "The Influence of Race on Ano-Rectal Diseases." The other speaker was Dr. Oscar B. Hunter, professorial lecturer, Georgetown University and American University, Washington. Dr. Hunter's subject was "The Clinical Significance of the Rh Factor."

Dr. Arild E. Hansen, chairman of the Department of Pediatrics, University of Texas School of Medicine, Galveston, and director of the University Texas Child Health Program, was recently a guest of medical faculties in New Orleans, where he discussed the nutritional status of children with special reference to lipid metabolism.

Births

Born to Dr. and Mrs. Charles Dickson, of Houston, a son, March, 1945.

SOCIETY NEWS

Austin-Waller Counties Society

April 17, 1945

Austin-Waller Counties Medical Society held its regular bi-monthly meeting April 17, in the home of Dr. and Mrs. Virgil Gordon, Sealy.

Members of the society and the auxiliary held separate sessions, following which refreshments were served by Dr. and Mrs. Gordon.

The society will hold its next meeting in June, at the home of Dr. and Mrs. J. B. Neely, Bellville.

Bell County Society

April 4, 1945

(Reported by O. B. Gober, Secretary)

Splenectomy—P. M. Ramey, Temple.
Management of Essential Hypertension—L. D. Stuart, Temple.

Bell County Medical Society met April 4, at the Kyle Hotel, Temple, with nineteen members and five guests present. The scientific program as given above was carried out.

The paper by P. M. Ramey on splenectomy was discussed by C. M. Simpson, L. R. Talley, and C. A. Stevenson. The paper on management of essential hypertension by L. D. Stuart was discussed by R. R. Curtis, Charles Phillips, V. J. Simmon, C. M. Simpson, and A. Ford Wolf.

Secretary Gober read a letter from Charles Phillips asking to be relieved from duty on some of the committees of the society. President Curtis thanked Dr. Phillips for the work he had done in the past, and expressed the hope that he would soon be able to carry on as usual.

Resolutions of sympathy were adopted on the death of Dr. A. E. Ballard, of Belton.

J. E. Bauman, Paul M. Wheelis, and T. J. Archer, Jr., were elected to membership.

Lee Knight, Temple, and W. F. Etter, Rogers, were elected to honorary membership on the motion of L. R. Talley, seconded by Charles Phillips.

Brown-Comanche-Mills-San Saba Counties Society

April 9, 1945

Modern Concepts of Etiology and Treatment of Hypertension—Major Victor F. Lief, M. C., Camp Bowie, Texas.

Brown-Comanche-Mills-San Saba Counties Medical Society met April 9, at the Hotel Brownwood, with twelve members and two visitors present. Major O. N. Mayo, of Brownwood, now stationed at Fort Sam Houston, San Antonio, was a welcome guest.

The scientific program as given above was carried out, with President H. L. Lobstein, presiding.

E. B. Richey lead a round-table discussion of a food handlers ordinance now pending before the Brownwood city council.

Eastland-Callahan Counties Society

April 17, 1945

The Use of Penicillin in the Treatment of Syphilis—Porter Brown, Fort Worth.
The Dangers of Fatigue—Shelton Barcus, Fort Worth.

Eastland-Callahan Counties Medical Society met April 17, at the Gholson Hotel, Ranger. Preceding a scientific program, members of the society were hosts at a dinner to members of the Stephens-Shackelford-Throckmorton and Palo Pinto-Parker Counties Medical Societies. Twenty-five physicians were present. After the dinner, the scientific program as given above was carried out.

Falls County Society

April 19, 1945

Malignancies of the Head and Neck—E. P. Hutchings, Marlin.
Clinical Cases.

Falls County Medical Society met April 19 at the Falls Hotel, Marlin.

Tom Glass, program chairman, presented the scientific program as given above. Following the paper by Dr. Hutchings on malignancies of the head and neck, a number of interesting cases were reported by members of the society.

Grayson County Society

April 17, 1945

Hip Fractures in the Aged—Samuel Nickerson, Regional Hospital, Camp Maxey.

Grayson County Medical Society met April 17, at the Hotel Grayson, Sherman, with S. O. Levin, president, presiding. A scientific program as given above was carried out.

Dr. Nickerson reported in detail the cases of two women, aged 85 and 92, respectively, who received fractures of the hip during the Antlers, Oklahoma, storm. Lantern slides and roentgenograms were shown illustrating the fractures and the treatment. The staff of the regional hospital at Camp Maxey took care of all the victims of the storm in the Antlers area, giving first aid to many and hospitalizing sixty patients.

Gray-Wheeler Counties Society

April 17, 1945

(Reported by H. L. Wilder, Secretary)

Ocular Foreign Bodies: Case Report—C. E. High, Pampa.
Sub-total Resection of the Stomach for Ulcer—E. W. Jones, Wellington.
Tubal Insufflation—C. B. Jones, Wellington.

Gray-Wheeler Counties Medical Society met April 17, at Pampa, with seventeen members and one visitor present. The scientific program as given above was carried out.

The case reported by C. E. High, was that of a foreign body in the lower lid of a man. Transillumination revealed a piece of steel, which was easily removed.

The paper of E. W. Jones was discussed by R. M. Brown, Captain W. D. Holt, Pampa Army Air Field; C. E. High, H. L. Wilder and W. C. Jones.

The paper of C. B. Jones was discussed by J. W. Gooch and K. W. Pieratt.

The following letter from Senator Grady Hazlewood was read, which came in response to a letter written to Senator Hazlewood by Secretary Wilder, at the direction of the society, regarding the hospital exemption bill pending in the Legislature:

"I have your letter and the attached resolution passed by your medical society.

"First, I want to express my great appreciation for the completeness of the information contained in the resolution. Most generally we get telegrams or letters here in the legislature that either say 'kill' or 'vote for' such and such measures without assigning any reason at all upon which we might be able to form a conclusion and cast an intelligent vote. You gentlemen have certainly given this bill considerable thought, and I really do appreciate being so fully advised.

"I quite agree with you in all things that this is a very bad bill. If I ever have the misfortune of getting injured in an accident, or taken to a hospital because of a sudden illness I sure as the world want to know in a general way who will be there at the hospital to take care of me. I can surely appreciate the fact that this bill would practically destroy the high standards of service now given by our first class hospitals. I shall certainly do anything that I may to bring about the defeat of this bill, including voting against it. In fact, this bill appears to be so bad, that I just can't believe it will ever get very far."

Hidalgo-Starr Counties Society

May 10, 1945

(Reported by Ottis Walker, Secretary)

Thyroidectomy (Motion Picture).
Clinical Cases.

Hidalgo-Starr Counties Medical Society met May 10, at the Edinburg hotel, with twelve members present. A scientific program, as arranged by R. E. Hamme, was presented as given above.

Following the showing of the motion picture film on thyroidectomy, an interesting and informative discussion was given by N. C. Ice, McAllen.

Several case histories were presented and discussed by members of the society.

Hunt-Rockwall-Rains Counties Society

March 13, 1945

(Reported by Harriet Rogers, Secretary)

Meningitis Following Bronchopneumonia: Case Report—H. M. Bradford, Greenville.
Malignancies—J. R. Maxfield, Dallas.

Hunt-Rockwall-Rains Counties Medical Society met March 13, at Greenville, with eleven members and five visitors present. Joe Becton, president, presided. The scientific program as given above was carried out. The case of meningitis reported by H. M. Bradford occurred in a child one year after bronchial pneumonia.

J. R. Maxfield illustrated his paper on differential diagnosis and treatment of malignancies with lantern slides in color, showing skin lesions of the face, lips and hand. Lesions of the tongue, breast and ovary were also shown. Dr. Maxfield emphasized that control of cancer depends first upon an early opportunity to examine the patient, and prompt reference of patients to specialists who are qualified in diagnosis, including biopsy, with early treatment by surgery or x-rays, singly, or combined. With coöperative treatment of the surgeon, radiologist, and pathologist, many cancers will be cured and lives will be prolonged.

Smith County Society

April 12, 1945

(Reported by Wm. M. Bailey, Secretary)

Present Aspects of the Problem of Malignancy—J. R. Maxfield, Jr., Dallas.
Chest Trauma—John Chapman, Dallas.

Smith County Medical Society members were entertained by the Woman's Auxiliary to the Smith County Medical Society, with a covered dish dinner, April 12, at the home of Dr. and Mrs. C. C. McDonald, Tyler. Mrs. R. B. Homan, El Paso, past president of the State Auxiliary, was a guest. The scientific program as given above was carried out. Both papers were illustrated by lantern slides.

J. R. Maxfield, in discussing present aspects of the problem of malignancy, pointed out that cancer still remains a major problem of medicine. It is on the increase, due to the increased span of human life as the result of advances in medical science. Dr. Maxfield emphasized that there is a time in the life history of all cases of cancer when they are curable. This period may be only a few weeks in the more malignant types, or it may be years in the more benign. Education of the public was stressed and especially the need for seeking medical attention immediately when there is abnormal bleeding from any body orifice, or when any gland, lump or swelling persists, or when any ulcer does not heal readily.

John Chapman in discussing chest trauma, stated that it is associated with two classes of wounds: penetrating and nonpenetrating. The results of either type of injury may be hemothorax, pneumothorax, or pyothorax, or any combination of these. The pneumothorax may be either simple, closed and under tension or open and sucking, and any of these varieties of pneumothorax may be associated with mediastinal and subcutaneous emphysema. Hemothorax may vary from insignificant bleeding to massive and almost instantly fatal hemorrhage. The infection in civilian injuries at least is not troublesome, but may occasionally be very severe and be associated with bronchopleural fistula. The lung itself, aside from laceration which usually is easily controlled, rarely undergoes any other type of damage. Occasionally pneumonia may develop or hematoma of considerable size may occur.

The principles of treatment consist primarily of measures to combat shock and to restore physiological pressure conditions within the pleural spaces. Fluid is withdrawn depending upon pressure, bleeding and infection. Rarely is it necessary to resort to open surgical procedures.

Tarrant County Society

May 1, 1945

(Reported by X. R. Hyde, Secretary)

The Ruptured Intervertebral Disk—Robert L. Sewell, Fort Worth.
The Health Department and the Physician—Harold M. Williams, Fort Worth.
X-Rays of the Month—X. R. Hyde, Fort Worth.

Tarrant County Medical Society met May 1, with twenty-six members present. The scientific program as given above was carried out.

The paper of Robert L. Sewell was discussed by T. H. Thomason, R. G. Baker, H. O. Deaton, F. S. Schoonover, and R. J. White. The paper of Dr. Williams was discussed by I. P. Barrett and J. F. Campbell.

At the conclusion of the scientific program, I. P. Barrett stated that no official business could be transacted by the society since a quorum was not present. Secretary Hyde read from the articles of incorporation, as follows: "Ten per cent of the membership shall constitute a quorum at any meeting."

F. S. Schoonover moved that since seventy-two of the members of the society were in the armed forces, the articles of incorporation quoted be interpreted as meaning 10 per cent of the active membership. The motion was seconded by R. J. White, and carried.

C. S. Woodward, member of the board of trustees, discussed the financial status of the society, and pointed out that the society would be short of funds before the year is out for the reason that seventy-two members are in the armed forces and the reserve which had been accumulated had been spent. Dr. Woodward suggested that each active member be assessed $7.00.

On motion of F. S. Schoonover, seconded by R. J. White, it was voted that each active member be assessed $10.00 in order to build up a reserve.

Following a discussion of whether or not meetings should be dispensed with during June, July and August, it was voted that such action be taken.

R. G. Baker, a delegate to the Council of Social Agencies, stated that following an investigation, the delegates of the society had voted favorably with regard to the development of a Child's Psychiatric Clinic, but endorsement by the society of that action was desired. Following proper motion and second, the society went on record as endorsing a Child's Psychiatric Clinic.

Jefferson County Society

May 14, 1945

(Reported by L. R. Byrd, Jr., Secretary)

Therapy in Cardiac Failure—Don W. Chapman, Department of Internal Medicine, Baylor University College of Medicine, Houston.

Jefferson County Medical Society met May 14, at the Hotel Dieu, Beaumont, with President Stuart Wier, presiding. The scientific program as given above was carried out. The paper of Don W. Chapman was discussed by J. C. Crager, D. C. Hager, and Taylor Walker.

During a business session following the scientific program, H. E. Alexander reported that the Jefferson County Medical and Dental bureau had become defunct, and that a desk, typewriter, and card files belonging to the society had been in use by the bureau. He reported that after obtaining bids on

the material, it had been sold to the highest bidder for $83.00, following which that amount was turned over to the secretary.

L. C. Powell reported that a motion picture machine could be purchased from a group of stockholders at a price of approximately $270.00.

On motion of E. D. Mills, it was voted that the machine be purchased for the society.

H. E. Alexander moved that Charles H. Todd be designated as custodian of the machine, which motion carried.

Taylor Walker moved that Dr. Todd be given authority to maintain the machine, any necessary expenditures being paid by the society, which motion carried.

L. C. Powell reported that the county health officer had advised that physicians had been negligent in reporting communicable diseases, and requested coöperation in the matter.

Wichita County Society

May 8, 1945

(Reported by Harry Ledbetter, Secretary)

Penicillin Treatment of Ulcerated Colitis—Captain Bernard B. Korostoff, M. C.

Lupus Erythematosis: Case Presentation—Captain Donald W. Leik, M. C.

Psychotic with Foreign Body in Stomach: Case Presentation—Captain Bernard B. Gadwood, M. C.

Myotonia Congenita: Case Presentation—Captain Lloyd W. Hatton, M. C.

Chest X-ray: Case Presentation—Major William L. Waskow, M. C.

Experiences with Malaria—Major Roger G. Magruder, M. C.

Infectious Arthritis of the Hip—Captain Frederick J. Raisch, M. C. (Discussed by Lt. Col. Claude N. Lambert, M. C.)

Relapsing Fever—Captain William C. Taft, M. C.

Pneumonia: Case Presentation—Captain Theodore R. Lombardo, M. C.

Wichita County Medical Society held a joint meeting with the staff of the Sheppard Field AAF Regional Hospital, at the hospital, May 8, 1945. The meeting was attended by approximately forty members of the society and sixty members of the medical staff of Sheppard Field.

Members of the society were guests of the staff of the station hospital at a sumptuous turkey dinner. After the dinner, Lieut. Col. Foster L. McMillan introduced Colonel Russell S. Leone, post surgeon, who delivered the address of welcome. After introductions of the president and chairman of the program committee of the society, the scientific program as given above was presented.

BOOK NOTES

[1]**The Etiology, Diagnosis, and Treatment of Amebiasis.** By Charles Franklin Craig, M. D., M. A. (Hon.), F. A. C. S., F. A. C. P., Colonel, United States Army, Retired, D. S. M. Late Commandant, Army Medical School and Assistant Commandant, Army Medical Center, Washington, D. C. Emeritus Professor of Tropical Medicine, Medical School, Tulane University of Louisiana, New Orleans, La. Cloth, 332 pages. Illustrated. Price, $4.50. Baltimore, The Williams & Wilkins Company, 1944.

Colonel Craig published a monograph on "Amebiasis and Amebic Dysentery" in 1934. The present volume contains all of the valuable information of the older book and much of the more recent data on this subject. An experience of many years with both the clinical and laboratory aspects of this disease enables the author to delineate in proper perspective these two important phases of amebiasis.

In twelve well written chapters, Colonel Craig considers the etiology, epidemiology, pathology, symptomatology, diagnosis and treatment of amebiasis. The book has a good subject and author index and a satisfactory bibliography.

The exposure of many of our troops to infection by these pathogenic protozoa and our realization that this disease is no longer confined to the tropics makes this a timely publication. It is a valuable addition to our literature on amebiasis.

[1]Reviewed by Paul Brindley, M. D., Galveston, Texas.

[2]**Neurosurgery and Thoracic Surgery.** Prepared and edited by the Subcommittees on Neurosurgery and Thoracic Surgery of the Committee on Surgery of the Division of Medical Sciences of the National Research Council. Cloth, 310 pages. Illustrated. Price $2.50. Philadelphia & London, W. B. Saunders Company, 1943.

One of the six Military Manuals prepared to aid the surgeon in the field, this book is not meant to cover the field of neurosurgery but the traumatic aspect alone. Howard Naffziger and a group of eleven distinguished neurosurgeons have prepared an outline covering most of the neurological situations likely to be met in war. Contributions by Francis Grant, J. Grafton Love, and John E. Scarff are included. Proven methods alone are included rather than more recent highly technical procedures which are carried out in the military hospitals away from the front. Unfortunately, there are many developments since the book has been published, and work such as the use of tantalum in skull and nerve repair and penicillin are not included. It would be an excellent book for the general surgeon in a small community, who must occasionally meet a neurosurgical problem.

The last 72 pages, edited by Evarts Graham, are devoted to traumatic thoracic surgery.

DEATHS

Dr. **Arthur E. Ballard**, of Belton, Texas, died December 30, 1944, of coronary thrombosis.

Dr. Ballard was born August 20, 1877, in Lockhart, Texas. His medical education was received in the old Fort Worth Medical College. During his years of private practice in Belton, he had taken postgraduate work in Tulane University, New Orleans, and the University of Chicago. He was in private practice in Belton from 1923 until 1942, at which time he retired because of ill health. After recovering his health, he became connected with the Texas State Department of Health, and served for a time as director of Laredo-Webb County Health Unit. In March, 1944, he became director of the Central Texas Health Unit at Belton, which position he held until his death.

Dr. Ballard was a member of the State Medical Association and American Medical Association through the Bell County Medical Society while residing in Belton, and the Webb-Zapata-Jim Hogg County Society during his residence at Laredo. He was also a member of the Central Texas District Medical Society. During his years of private practice, he had taken an active part in civic life. He was a past-president of the Belton Rotary Club, a member of the Masonic Order, Oddfellows, and Woodmen of the World. He was a member of the Board of Stewards of the Methodist Church. He was held in high regard by all who knew him.

Dr. Ballard is survived by his wife, the former Miss Myrtle Gillis of Belton; two sons, Dow Ballard and A. E. Ballard, Jr., both of whom are in the armed services; and one daughter, Mrs. George Edds, Belton.

Dr. **John William Macune**, of Ballinger, Texas, died April 3, 1945, of lymphosarcoma.

Dr. Macune was born January 9, 1882, at Cameron, Texas, the son of Charles W. and Sallie Vickery Macune. He received his preliminary education in

[2]Reviewed by James Greenwood, Jr., M. D., Houston, Texas.

the schools at Cameron and Beaumont, Texas, and Washington, D. C. His medical education was obtained at Southern Methodist University Medical School, Dallas, from which he was graduated in 1913. He began the practice of medicine at Davilla, Texas, in 1913. During World War I he served as a First Lieutenant in the Medical Corps of the Army of the United States. In 1919, he resumed private practice at Eagle Pass, Texas. In 1924, he moved to Ballinger, where he lived for the remainder of his professional life.

Dr. Macune had been a member of the State Medical Association and American Medical Association for many years through the various county medical societies where he resided. He served Runnels County Medical Society as president in 1942. He had served as county health officer of Runnels County for fifteen years, and as city health officer of Ballinger for ten years. He took an interest and prominent part in the civic life of his community, having served as chairman of the infantile paralysis organization for the county, and as an honorary member of the Council for Boy Scouts.

Dr. Macune was married to Miss Nell Haygood January 21, 1908, at New Orleans, Louisiana. He is survived by his wife; one daughter, Alida, of Ballinger; and one son, Donnell H., now serving in the United States Navy at Alameda, California; two sisters, Mrs. Sarah Johnson, Sabine Pass, and Miss Katherine Macune, Fort Worth, and one brother, Reverend D. Macune, San Antonio.

Dr. Robert Trimble Foster, of Groom, Texas, died March 27, 1945, of heart disease.

Dr. Foster was born October 26, 1883, in Harrisonville, Missouri, the son of Charles and Emma Foster. His medical education was received in the Louisville Medical College, Louisville, Kentucky, and the Atlanta school of Medicine, Atlanta, Georgia, from which latter institution he was graduated in 1906.

DR. R. T. FOSTER

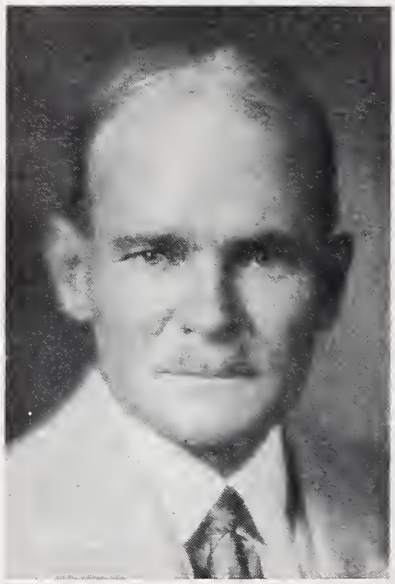
After his graduation, he served an internship in an Atlanta hospital. He lived and practiced at Boonville, Wise County, Texas, from 1907 to 1914. He was in active practice in Groom from 1915 to 1934, at which time he suffered a cerebral hemorrhage, which confined him to his bed for the remainder of his life.

Dr. Foster was a member continuously in good standing of the State Medical Association and American Medical Association through the Wise County Medical Society, while practicing at Boonville, and the Potter County Medical Society during his years of practice at Groom. In 1935, he was elected an honorary member of the State Medical Association of Texas, which membership status continued for many years. He had served as a county health officer, and during World War I, as a member of an exemption board. He had also served as local surgeon for the Rock Island Railroad during his medical career. He was a member of the Baptist Church, a Mason, and a member of the Eastern Star.

Dr. Foster is survived by his wife, the former Miss Carrie L. Wimberly, to whom he was married June 30, 1914, in Boonville. He is also survived by a daughter, Mrs. William H. Dean, Buffalo, New York; a sister, Mrs. Robert Spivy, Bonham, Texas; and a brother, Lt. Colonel E. H. Foster, Albuquerque, New Mexico.

Dr. John M. Furman, of Fort Worth, Texas, died March 21, 1945, of coronary occlusion, the fatal attack occurring while Dr. Furman was ministering to a patient at the bedside.

Dr. Furman was born September 30, 1871, in Landrum Place, South Carolina, the son of John M. and Mary Strother Furman. He came to Belton, Texas, with his parents at an early age. His father served Bell County as judge for twenty-six years. Dr. Furman's academic education was received in the public schools and the University of Texas, Austin. Prior to the study of medicine, he was in the insurance business in Fort Worth and New York, for seven years. Deciding upon medicine as a vocation, he entered the Memphis Hospital Medical College, Tennessee, from which he was graduated in 1898. He then served an internship in the Southern Pacific Hospital, Houston, following which he located in Fort Worth for the practice of medicine and surgery, which was his home for the remainder of his professional life.



DR. JOHN M. FURMAN

Dr. Furman was a charter member of Tarrant County Medical Society, after the reorganization of the American Medical Association. He was a member continuously of the State Medical Association and the American Medical Association, the North Texas District Medical Society, when Fort Worth was in that district, and after its relocation, of the Northwest Texas Medical Society. He served Tarrant County Medical Society as president in 1939, and as delegate to the State Medical Association on more than one occasion. He had served the State Association on important committees. Dr. Furman was a physician of scholarly attainments. As chairman of the Memorial Exercises Committee, of the State Medical Association, he delivered a memorial address that will long be remembered. The talents that made him a leader in medical affairs in his society endeared him to its members, and to his patients. He was a thirty-second degree Mason. His hobbies were hunting and fishing, particularly quail shooting with bird dogs which he had personally trained.

Dr. Furman was married March 22, 1898, to Miss Etta Mulkey of Fort Worth. He is survived by his wife; a son, Dr. Jack Furman, Fort Worth; a daugh-

ter, Mrs. W. Gardner Godwin of Colorado Springs, Colorado; and a sister, Mrs. James H. Hart of Austin.

Dr. George L. Lewis, of San Angelo, Texas, died April 5, 1945, in a San Angelo hospital, of coronary occlusion.

Dr. Lewis was born June 12, 1881, in Mills County, Texas, the son of Mr. and Mrs. J. R. Lewis. His academic education was received in the public schools and the University of Texas, Austin. His medical education was obtained in the University of Texas School of Medicine, Galveston, from which he was graduated in 1906. He began the practice of medicine at Eldorado, where he remained eighteen years. He then located in San Angelo, where he had been in active practice for thirty and one-half years. Early in his professional career, he took special work in eye, ear, nose and throat, in Chicago and New York, and had limited his work to this specialty during his practice in San Angelo, for the past several years.

DR. G. L. LEWIS

Dr. Lewis had been a member continuously in good standing of the State Medical Association and American Medical Association, through the Schleicher County Medical Society while living in Eldorado, and the Tom Green and Tom Green Eight County Medical Society, after his location at San Angelo. He was also a member of the Fourth District Medical Society and Southern Medical Association. He had served both his county medical society and district medical society as president. He was a founder member of the San Angelo Medical and Surgical Clinic, which was organized in 1929. He was held in the highest esteem by his medical associates, and had given of himself unstintedly in the practice of his profession, without regard for remuneration where charity was deserved. His hobby was ranching, and he had been as successful in his avocation as in his vocation. At the time of his death, he had acquired large ranching interests.

Dr. Lewis was a member of the Baptist Church, which institution he had served for thirty-five years as a deacon. He was a Mason, a member of the Knights of Pythias, and Woodmen of the World.

Dr. Lewis is survived by his wife, the former Miss Susan Myrtle Willis, to whom he was married May 30, 1906, in Mills County. He is also survived by a daughter, Mrs. Blake V. Duncan, San Angelo; and a son, Lt. W. Jack Lewis, Chaplain, United States Naval Reserve, now on active duty at Quoddy Village, Maine; a sister, Mrs. C. R. Willis, Mullen; and three brothers, Jim Lewis, Bangs; Joe Lewis, Brownwood, and Arch Lewis, San Angelo.

Dr. Claude A. Mathews, of Austin, Texas, died April 10, 1945, of subacute bacterial endocarditis.

Dr. Mathews was born April 17, 1887, in Austin, Texas the son of Dr. W. J. and Mrs. Margaret Bannerman Mathews. Mathews School in Austin was named for his father who was an outstanding civic leader of that city during his life. Dr. Mathews academic education was received in the public schools of Austin. His medical education was obtained in the University of Texas School of Medicine, from which he was graduated in 1911. After graduation, he served an internship in Saint Mary's Infirmary, Galveston, Texas. He began the practice of Medicine at Austin, which was his home for the remainder of his professional life.

Dr. Mathews had been for many years a member of the Travis County Medical Society, the State Medical Association and American Medical Association. He served the State Medical Association as secretary of the Section on Obstetrics and Gynecology in 1927. He had served as examining physician for Travis County Selective Service Board No. 3 from 1940 to 1943. He was a member of the Phi Beta Pi medical fraternity. Dr. Mathews was a member of the Presbyterian Church. He was held in high regard by all who knew him.

Dr. Mathews was married March 10, 1924, to Miss Annie Jaehne, of Austin, who survives him. He is also survived by two daughters, Mrs. Charles F. Murray, and Miss Margaret Mathews, Austin; a son, Claude A. Mathews, Jr., now serving in the Army of the United States; and a sister Mrs. George Haan, Decatur, Illinois.

Dr. Claude T. Keyes, of San Angelo, Texas, died May 8, 1945, in a San Angelo hospital, of carcinoma of the liver.

Dr. Keyes was born May 14, 1870, in Fulton, Mississippi, the son of William Harvey and Anna Aura (Turner) Keyes. His preliminary education was received in the public schools of Itawamba County, Mississippi. His medical education was received in the Memphis Hospital Medical College, from which he was graduated in 1897. He had taken postgraduate work in the University of Chicago, and in Colorado Springs, Colorado. He began the practice of medicine in Central Grove, Mississippi, where he remained until 1903. He then lived and practiced in Tupelo until 1911, when he moved to San Angelo, which was his home for the remainder of his professional life.

DR. C. T. KEYES

Dr. Keyes had been a member for many years of the State Medical Association and American Medical Association through the Tom Green County Medical Society, and after its reorganization, the Tom Green Eight County Medical Society, of which he was an honorary member at the time of his death. He was also a member of the National Tuberculosis Association. He was a member of the Baptist Church, which institution he had served as a deacon for forty years. He was a thirty-second degree Mason. Dr. Keyes

COLLEGE OF PHYSICIANS OF PHILADELPHIA

was held in the highest regard by all who knew him as a gentleman in every respect. He was also generally beloved in the community at large where he had lived and practiced for so many years.

Dr. Keyes was married January 14, 1900, to Miss Martha Lillie Davis, of Monroe County, Mississippi. His wife preceded him in death July 22, 1924. He is survived by two daughters, Mrs. S. Baker Mallett and Mrs. Sam M. Johnston, of San Angelo; four sons, Harvey Keyes, San Angelo; John Keyes, Los Angeles, California; Lt. Edd B. Keyes, now on active duty with the U. S. Army, and CM/1c Frank Keyes, Eden, Texas, now in San Francisco, California; and five sisters, Mrs. D. S. Ballard, and Mrs. George Thompson, Tupelo, Mississippi; Mrs. W. G. Francis, Nettleton, Mississippi; Mrs. E. F. Ballard, Dallas, Texas; and Mrs. Erin Mitts, New Orleans, Louisiana.

Dr. Robert McNair Purdie, of Houston, Texas, died at his home April 9, 1945, of subarachnoid hemorrhage.

Dr. Purdie was born in Ogden, Utah, July 4, 1898, the son of Mr. and Mrs. James Purdie. He moved to Pocatello, Idaho, with his parents at an early age, where he received his preliminary education in the public schools, following which he attended the University of Utah, at Salt Lake City. His medical education was obtained at Northwestern University Medical School, Evanston, Ill., from which he was graduated in 1922. He served his internship at Cook County Hospital, Chicago, Illinois, following which he specialized in internal medicine and diagnosis. He began the practice of medicine in Houston in 1925, and with the exception of a brief period of military service in World War I, he had been in active practice up to the time of his sudden death.

DR. ROBERT McNAIR PURDIE

Dr. Purdie was a member in good standing throughout his professional life of the Harris County Medical Society, the State Medical Association and the American Medical Association. He served Harris County Medical Society as secretary in 1930. He was also a member of the South Texas District Medical Society, the Houston Academy of Medicine, and the American College of Physicians. He had served on the staffs of Hermann, St. Josephs and Memorial hospitals, Houston. He was held in the highest esteem by his medical associates as an accomplished internist, and his untimely death is a loss to the medical profession of Harris County and to the citizenship of Houston.

Dr. Purdie was married to Miss Billie Burke, of Lufkin, June 16, 1927. He is survived by his wife; one daughter, Patricia, and two sons, Robert and Burke, all of Houston; and two sisters, Mrs. Florence Eggertsen, Salt Lake City, Utah, and Mrs. Ada Thirkeldsen, of Pocatello, Idaho.

AUXILIARY NOTES

Officers of the Woman's Auxiliary to the State Medical Association of Texas: President, Mrs. C. B. Alexander, San Antonio; President-Elect, Mrs. George Turner, El Paso; First Vice-President. Mrs. S. M. Hill, Dallas; Second Vice-President, Mrs. L. W. O. Janssen, Corpus Christi; Third Vice-President, Mrs. Troy A. Shafer, Harlingen; Fourth Vice-President, Mrs. Mark H. Latimer, Houston; Treasurer, Mrs. F. R. Rugeley, Wharton; Recording Secretary, Mrs. Paul H. Power, Waco; Corresponding Secretary, Mrs. Wilbur Robertson, San Antonio; Publicity Secretary, Mrs. E. L. Howard, Fort Worth; Parliamentarian, Mrs. W. R. Klingensmith, Amarillo.

Mrs. Charles B. Alexander of San Antonio, the twenty-eighth president of the Woman's Auxiliary to the State Medical Association of Texas, was born in Houston, the second child of Dr. Hugh Cunningham and Mamie Parker Cunningham. The medical profession has played a happy and important part in the life of Olney Cunningham Alexander; for not only were her father and her grandfather doctors, but her doctor husband is also the son of a doctor.

MRS. CHARLES B. ALEXANDER

When Olney was four, her gracious and charming mother died; and the hospitable Cunningham home in Houston was broken up. Olney and her brother, Hugh went to Denver, Colorado, to live with their aunt, Mrs. P. L. Callahan. When she was fifteen, Olney returned to Texas to live with another aunt, Mrs. L. S. McDowell at Big Spring. She attended school at the old Presbyterian College for girls at Milford, Texas, and later the University of Texas. Here she was a member of the Alpha Delta Pi sorority and received the Bachelor of Arts degree. At this time her father was a country doctor in the little town of Roganville, and her brother was an attorney in Beaumont.

After her graduation at the University, Olney went to Galveston, where she became the head of the History Department at the Ball High School. In Galveston she met Charles Alexander, son of Dr. and Mrs. C. M. Alexander, of Coleman, a medical student, soon to become an intern in the John Sealy Hospital. When Charles completed his internship, he and Olney were married at the First Presbyterian Church at Galveston. They lived for a short time at Bessmay and Pineland, where Dr. Alexander was the physician for a lumber company.

Dr. Alexander soon decided to make pediatrics his life work; and Mrs. Alexander with her baby daughter, Mary Olney, accompanied him first to New York City, then Chicago, then Boston. She likes to recall those days of living in small apartments, of airing the baby in the park, and of being delighted to find that a baby of two could be entertained in an Art Museum.

The Alexanders lived for one year in Beaumont,

then moved to San Antonio, where they have lived for the past fifteen years.

Mrs. Alexander has always taken an active part in the work of her church, the Medical Auxiliary and the literary clubs. She is noted for her book reviews. Her chief interests are her husband, Charles, and her daughter, Mary Olney, recently graduated from the Hockaday Junior College at Dallas.

Mrs. Alexander has served as president of the Bexar County Medical Auxiliary, as president of the Agusta Literary Club, as president of the Woodlawn P. T. A., as vice-president of the City Federation of Women's Clubs, as vice-president and director of the Auxiliary to the San Antonio Home and Hospital for Unwed Mothers, and has held an office almost continually in the Auxiliary of the First Presbyterian Church. She has served on the Nurses Recruiting and Disaster Committees of the American Red Cross. She has served as Public Relations and Bulletin Chairman of the State Medical Auxiliary, and gave the response to the address of welcome at the last conventions, both at Dallas and at Houston.

The twenty-eighth president brings with her a great devotion for the American medical heritage and a high courage to carry on the battle for the American way of life.

The San Antonio Executive Board Meeting.—The Executive Board of the Woman's Auxiliary to the State Medical Association of Texas met in called session May 16, 1945, at the Medical Library, San Antonio. Thirty-two board members and thirty-six members from the Bexar County Auxiliary registered.

Following registration and an informal "get-together," the meeting was called to order by the President, Mrs. Sam E. Thompson of Kerrville. The session was opened with the Lord's Prayer in unison. Greetings from the hostess auxiliary were brought by Mrs. J. R. Nicholson, President of the Bexar County Auxiliary. Mrs. W. Frank Armstrong, Fort Worth, gave the response. The business of the morning consisted of reports from state officers and council women.

The meeting recessed at high noon to enjoy a unique style show presented by the Bexar County Auxiliary and to partake of a buffet (no-host) luncheon.

Business was resumed at 1:30 p. m. Reports of standing committees were heard. At the conclusion of the reports, a Memorial Service was conducted by Mrs. John T. Moore, Houston. Officers for the coming year were then elected and installed by Mrs. S. F. Harrington, Dallas, which concluded the business of the day.

Following adjournment the Bexar County Auxiliary honored Mrs. Sam E. Thompson, and Mrs. C. B. Alexander, with an informal tea.

On the morning of May 17, Mrs. C. B. Alexander, President, entertained the new board with a delightful breakfast at the Manor House. The Post-Executive Board meeting was held around the breakfast table.

The Auxiliary wishes to express sincere appreciation for the work done by the Bexar County Auxiliary in making this meeting not only possible but most enjoyable.—Mrs. Mark H. Latimer, Recording Secretary.

AUXILIARY NEWS

Bowie County Auxiliary met April 27, at the home of Mrs. J. T. Robison, with Mrs. C. A. Smith and Mrs. Ralph Cross, as co-hostesses. Mrs. J. T. Robison, president, presided over a special session.

Mrs. Harry Murray gave the secretary's report, following which reports were received from other officers and chairmen of standing committees. Mrs. C. H. Frank gave a review of current events, with particular stress on malaria control. Mrs. Hayes McClerkin gave an interesting talk on antique glass, telling the romance of medicine vials used for bitters and perfumes. An exhibit of attractive bottles and other glass was displayed. Following the program, an ice course was served.

Dallas County Auxiliary held a morning coffee April 4, at the Melrose Hotel, Dallas.

Mrs. V. Y. Rejebian, who was introduced by Mrs. Robert Winn, reviewed "Earth and High Heaven." Hostesses were members of the executive board. Mrs. James J. Terrill, treasurer, and Mrs. Sydney S. Baird, chairman of the budget committee, presided at the coffee table.

The executive board of the auxiliary met April 3, at the home of Mrs. George M. Underwood.

Dallas County Auxiliary held its last meeting of the year May 2, at the home of Mrs. S. M. Hill, Dallas. Mrs. Cecil O. Patterson presided during a business session, and officers were installed by Mrs. O. M. Marchman, as follows: Mrs. Joseph M. McCracken, president; Mrs. J. Forest Buchanan, president-elect; Mrs. Dayton G. McBride, first vice-president; Mrs. Sydney S. Baird, second vice-president; Mrs. J. Dennis O'Brien, third vice-president; Mrs. Harry B. Sowers, treasurer; Mrs. Guy Tittle, recording secretary; Mrs. T. W. Bywaters, corresponding secretary; Mrs. Hall Shannon, parliamentarian; Mrs. J. R. Maxfield, Jr., publicity; Mrs. U. P. Hackney, historian.

Members of the courtesy committee were hostesses, with Mrs. McCracken, incoming president, and Mrs. Patterson, retiring president, presiding at the coffee service.

The executive board held a meeting May 1, at the home of Mrs. John E. Ashby, Dallas.

Harris County Auxiliary had a well attended meeting in March. A year's supply of cod liver oil was sent to the Tuberculosis Hospital for Children.

Major Leon Halden, professor of Government at the University of Houston, reviewed his army experiences while in Italy, and discussed world problems which will be considered at the peace conference. Professor Halden's address was informative and interesting. A social hour followed.

Hopkins-Franklin Counties Auxiliary met at the home of Mrs. S. Byrd Longino, Sulphur Springs, which was the first anniversary meeting since the organization of the auxiliary on April 5, 1944, which also took place in the home of Mrs. Longino. Roll call was answered with selections from medical journals.

The auxiliary voted to undertake several new projects. Mrs. E. H. Stirling and Mrs. Joe B. Wood were welcomed as new members. Following a brief special session, Mrs. Kenneth Brice reviewed "On Being a Real Person." At the conclusion of the program a tea plate was served by the hostess.

Hunt-Rockwall-Rains Counties Auxiliary met April 3, at tthe home of Mrs. C. T. Kennedy, Sr., and Mrs. C. T. Kennedy, Jr., Greenville, with Mrs. W. P. Philips, and Mrs. W. E. Pennington as assistant hostesses. Mrs. J. S. Cooper presided during a business session.

Mrs. H. W. Maier gave the devotional from Psalms.

Mrs. W. L. Wilbanks gave a program on mental health, assisted by Mrs. Anna Becton, Mrs. C. T. Kennedy, Sr., and Mrs. B. F. Arnold.

During a social hour refreshments were served.

Jefferson County Auxiliary held a luncheon session May 2, at the Goodhue Hotel, Beaumont, with Mrs. I. T. Young and Mrs. F. J. Beyt as hostesses. This was the final activity of the auxiliary until fall. Mrs. B. J. Fett, Port Arthur, retiring president, presided. Annual reports were received.

The following new officers were installed: Mrs. John H. Carter, Beaumont, president; Mrs. B. F. Pace, Nederland, president-elect; Mrs. J. A. Bybee, Beaumont, first vice-president; Mrs. M. F. Raine, Port Arthur, third vice-president; Mrs. P. T. Petit, Beaumont, fourth vice-president; Mrs. F. W. Sutton, Beaumont, recording secretary; Mrs. R. H. Engledow, Beaumont, treasurer; Mrs. T. M. Tyndal, Beaumont, corresponding secretary; Mrs. E. C. Ferguson, Beaumont, publicity secretary; Mrs. A. R. Autrey, Port Arthur, historian, and Mrs. B. J. Fett, Port Arthur, parliamentarian.

Liberty-Chambers Counties Auxiliary held its last meeting of the year in the home of Mrs. A. L. Delaney, Liberty. Mrs. E. R. Richter, president, presided and gave a report of district and state auxiliary meetings.

New officers for 1945-1946 were installed, and Mrs. A. L. Delaney was presented with the gavel. Mrs. Delaney announced committees for the new year. Mrs. Delaney presented a silver compote to Mrs. E. R. Richter, a gift from members of the auxiliary. Mrs. Richter expressed her appreciation of the gift. The auxiliary adjourned until meetings are resumed in October, 1945.

Mrs. Constance K. Powell, wife of Dr. E. V. Powell, of Waco, died May 11, in a Waco hospital. Mrs. Powell is survived by her husband; two sons, E. V. Powell, Jr., Southwestern Medical Foundation, Dallas, and Egan C. Powell, Waco; one daughter, Mrs. David A. Rich, Rochester, New York; one brother, Arthur K. Vonbieberstein, Boston, Massachusetts; and one sister, Mrs. Elva Money, Providence, R. I.

TRANSACTIONS
OF THE
CALLED MEETING
OF THE
EXECUTIVE BOARD
WOMAN'S AUXILIARY
TO THE
STATE MEDICAL ASSOCIATION
OF TEXAS

SAN ANTONIO, MAY 16, 1945

The called meeting of the Executive Board of the Woman's Auxiliary to the State Medical Association of Texas was held May 16, 1945, in the Medical Library at San Antonio. The board convened at 10:00 a. m. with the president, Mrs. Sam E. Thompson, presiding.

The meeting opened with the Lord's Prayer in unison.

The address of welcome was given by Mrs. J. R. Nicholson, president of the Bexar County Auxiliary, as follows:

Address of Welcome

On behalf of the Bexar County Medical Auxiliary, I extend to the State Executive Board a most hearty welcome. This meeting is an unexpected pleasure. We feel complimented that Mrs. Thompson has chosen to have her called meeting in San Antonio.

The San Antonio doctors and their wives have always enjoyed having the State Medical Association meet in San Antonio. We look forward with pleasure to the time when the world is at peace again and we can resume our regular State meetings. It is a delightful way to renew old friendships.

So today we want you to know that it is a great pleasure to have you with us and we hope you will enjoy being with us as much as we enjoy having you.

Mrs. W. Frank Armstrong, Fort Worth, responded to the address of welcome, as follows:

Response to the Address of Welcome

Visiting San Antonio is always an interesting experience and a great pleasure to Texans; but to come as guests of the Bexar County Auxiliary means to us so privileged, superlatives of both pleasure and interest. Your hospitality and our common interest in the organization for which we shall plan today make the hours we shall spend with you all too fleeting.

As we look ahead, it occurs to me that an especial emphasis should be laid upon our duties, our privileges and our responsibilities to our service people who shall return to us during the year. While all of us, in measure, have felt the inconveniences, the hardships and the worries of living in a world at war, the problems of us on the home front are not comparable to those of our members in the armed forces. May our planning, both as an organization and as individuals, be such that we shall receive our returning doctors and their families with such sympathetic understanding that the bonds of friendship shall be stronger than ever before.

We all have faith to believe that in the months ahead our Auxiliary will be able to resume all normal activities, and that it will move forward to even greater achievements than in the years that have flown.

The president then called for the reading of the minutes of the last board meeting. Upon motion of Mrs. W. S. Red, Jr., Houston, it was voted to dispense with the reading of the minutes.

Letters from Dr. Sam E. Thompson, Chairman of the Board of Trustees, Dr. R. B. Anderson, Assistant Secretary, Mr. Jeff L. Reese, Director of Public Relations of the State Medical Association, were read by the secretary. The letters dealt with legislative problems and praised the Auxiliary for its immediate and effective response to every call by the State Medical Association.

The president appointed Mrs. Scott C. Applewhite, San Antonio, to act as Parliamentarian in the absence of Mrs. E. W. Jones, Wellington.

The committee to approve the minutes was named by the president as follows: Mrs. W. S. Red, Jr., Mrs. R. C. Bellamy and Mrs. T. J. McElheney.

Annual reports were then received as follows:

Report of the President

In my report to you today, I begin with a heart full of love for each of you. Your encouraging words and the splendid help given me throughout this year of heartaches and increased home duties makes me sure that the many responsibilities assumed and carried out so well, will bring us closer together with an understanding of the problems of the medical profession. Through this understanding I feel that the Woman's Auxiliary will continue to grow in strength and usefulness.

The one disappointment in my year's work is the fact that I could not visit each Auxiliary; worse than traveling conditions, illness this Spring denied me the pleasure of breaking bread with some of you.

I attended the A. M. A. meeting in Chicago with the full twenty delegates allowed. I want to thank each of them for their splendid attendance and loyal support. We, of course, opposed the changes in the National Constitution and By-Laws, feeling that State Presidents should retain their vote in National affairs.

Here I would like to say that I mailed cards, some 4,500, to each doctor's wife in the State, to read the June JOURNAL so that she would know what the Auxiliary is doing.

Dr. C. S. Venable, who at that time was Chairman of the Committee of Public Relations of the State

Medical Association, was kind enough to place the names of all State Auxiliary Chairmen and County Presidents on the mailing list of the Newsletters published each month, informing them of legislative matters.

On September 8, 1944, it was my pleasure to entertain the members of the Executive Board in my home at Kerrville. Attending were twenty-two members of the Executive Board, thirty visitors and eleven Past Presidents of the State Auxiliary.

Dr. Frank Connally of Waco, President of the State Medical Association, Dr. Sam E. Thompson, Chairman of the Board of Trustees, and Dr. E. C. Ferguson of Beaumont, were speakers of the day. I can best express their splendid talks by saying I wish every doctor's wife, whether or not members of the Auxiliary, could have heard their discourses on the problems of county, State and Nation. I have tried to pass on to you throughout the year the plans adopted by the Board, and I hope you are not tired of my many letters and cards. Legislative matters seem to have been the theme of the year's work, Texas having more than her share, both State and National.

It was my privilege to meet in Austin with the Legislative Committee of the State Medical Association concerning the chiropractic and naturopathic license bills. We were asked by the State Medical Association at that time to assist in defeating these bills. My immediate contact with Mrs. S. H. Watson, our Legislative Chairman, produced splendid results, and letters (about 2,500) were sent to all Auxiliary members, and to many of the doctors' wives who were not Auxiliary members, urging them to write their Senators and Representatives, and to ask their friends to do likewise. The response was great, and I feel that through your efforts these bills are defeated for the present. The Wagner-Murray-Dingell bill in Congress is far from dead; it is just having a face lifting and new spring clothes. Let me urge each of you to keep informed regarding this disguised legislation.

I want to thank Dr. Frank Connally, Dr. R. B. Anderson and Dr. Holman Taylor for their patience, kindness, splendid assistance, advice and help.

Early in the year's work I wrote a letter to the wives of doctors who were Presidents of county medical societies where there were no auxiliaries, trying to interest them in organization and legislative matters. From these letters I had many replies and found them all filled with the same interest—war work and legislation. I knew Auxiliary members were doing all kinds of war work, and now I know that every doctor's wife in the State is doing the same. One Auxiliary, Grayson County, set a National example in their work with a civilian blood bank. In five collections of plasma they obtained 3,518 pints of blood from 4,579 civilian donors. Of this amount Grayson County kept 10 per cent for emergencies. This work was done exclusively by the Auxiliary, and they have made plans to continue.*

I shall not discuss the activities of the different Chairmen, as they will give their reports today.

It has been my responsibility to call a meeting of the Executive Board to conduct the business of our annual session for the first time in our twenty-seven years; this, of course, is regrettable. War conditions, transportation and hotel accommodations made it necessary for the Office of War Transportation to cancel all conventions with anticipated attendance of more than fifty out of town registrants.

It has been my earnest desire throughout the year to hold high the standards and ideals of Auxiliary. I have striven to answer all letters and to help in every way when called upon. I owe to my State Officers and to the County Presidents the credit for whatever success we may have achieved in this year's work. And now my gratitude to my Sister Auxiliary for this splendid meeting today.

Respectfully submitted,

MRS. S. E. THOMPSON, Kerrville.

*Texas State J. Med., February, 1945, p. 552.

Mrs. Frank Haggard, San Antonio, moved that the report of the president be accepted as read, and that the body express its appreciation of her untiring efforts and splendid accomplishments with a rising vote of thanks.

Upon motion of Mrs. R. C. Bellamy, Daisetta, it was voted to accept the following reports as a whole at the close of their reading.

REPORT OF PRESIDENT-ELECT

Being President-Elect is like accompanying the doctor to the postgraduate clinic: Nothing is contributed; but the ride is enjoyable, the company agreeable, and the entertainment refreshing. The honor of the office is out of all proportion to the duties involved. However, seriously speaking, the President-Elect is grateful that the past twelve months have been free of specific duties. The time is all too short to become familiar with the inner workings of all branches of the Auxiliary, to plan a year's program, and to appoint the many chairmen needed for the administration of the affairs of this large organization.

This year of serious study has imbued the President-Elect with pride in the accomplishments of each president in the past; it has awakened her to the problems facing the medical profession; and it has aroused her determination to assist in every possible way the State Medical Association in its efforts to protect the public health of Texas.

The President-Elect wishes to take this opportunity to thank Mrs. Thompson for her many courtesies and valuable assistance during the year, and to express her appreciation to the loyal doctors' wives who have so graciously accepted the responsibilities of the Auxiliary for the coming year.

MRS. CHARLES B. ALEXANDER, San Antonio.

REPORT OF THE FIRST VICE-PRESIDENT—ORGANIZATION CHAIRMAN

This has been a war year with a great number of our doctors in the service, and their wives unsettled. As your Organization Chairman, I have urged each doctor's wife to be a member of the State Auxiliary.

Each Council Woman has stressed members-at-large when the organization of an Auxiliary is not possible at this time. It is a real pleasure to report a total paid-up membership of 2,377; of this number 132 are members-at-large.

The number of meetings have varied; some auxiliaries have met regularly, and some with distances so great have had special meetings.

It is with genuine gratitude that we extend congratulations to Mrs. L. L. D. Tuttle, Council Woman of District 9, and a welcome to our newest auxiliary, Brazoria County, organized with 12 members.

Your chairman is grateful for the wonderful council women that I have been privileged to work with this year, and for their perfect coöperation.

Many letters have been written by the Council Women and by your Chairman. Personal letters were written, and mimeographed copies of "The Duties of A Council Woman," and "How to Organize an Auxiliary," with a map of Texas, showing the organized and unorganized counties of each district, were mailed to each Council Woman. A personal letter was written to each county president, asking that each doctor's wife be invited to be a member of her county auxiliary.

Membership cards have seen sent to each member-at-large. This has created more interest, and the members feel that they are a definite part of our State Auxiliary with their membership cards.

I wish to thank council women, and county presidents for their interest and coöperation. I also wish to thank our State President, Mrs. Sam Thompson, for her splendid ideas and perfect coöperation.

It has been a pleasure and a privilege to serve as your Organization Chairman this year.

Mrs. Ramsey H. Moore, Dallas.

Report of the Second Vice-President—Physical Examinations Chairman

The Second Vice-President has written letters to every auxiliary president urging reports of physical examinations. Also, at a meeting of the Fourth District Auxiliary in San Angelo, an appeal was made to give health programs at every county auxiliary meeting in the district. Thirty-five auxiliaries responded to letters, nine of which had no physical examinations to report. Twenty-two auxiliaries reported examinations for 258 doctors, 270 doctors' wives, 281 children, and 88 servants. Four auxiliaries reported 472 examinations, but did not segregate them. In all, a total of 1,755 physical examinations were reported from 30 auxiliaries.

It has been inspiring to work under the able guidance of our State President who kept us reminded and informed of our duties. Also, I appreciate the remarkable plan for saving time, paper, and effort devised by our State Secretary.

It is with pleasure that I submit this report.

Mrs. H. B. Allen, Brownwood.

Report of the Third Vice-President—Hygeia Chairman

Of the forty-six organized county medical auxiliaries, twenty-five have reported subscriptions secured for *Hygeia*, as follows: Dawson-Lynn-Terry-Gaines-Yoakum, 6; Childress-Collingsworth-Hall, 48; Tom Green, 25; Brown-Mills-San Saba, 4; Kerr-Kendall-Gillespie-Bandera, 22; Bexar, 30; Hidalgo-Starr, 3; Travis, 12; Dewitt-Lavaca, 20; Wharton-Jackson-Matagorda-Fort Bend, 4; Washington, 8; Austin-Waller, 2; Liberty-Chambers, 33; Jefferson, 52; Cherokee, 6; Johnson, 4; Hunt-Rockwall-Rains, 28; Dallas, 155; Hopkins-Franklin, 4; Grayson, 5; Bowie, 31; Ector-Midland-Martin-Howard-Andrews-Glasscock, 4; Harris, 99; Taylor-Jones, 8; Wichita, 2.

Twenty-nine county auxiliaries reported subscriptiones sold to *Hygeia*, and the total number of subscriptions obtained was 719.

Respectfully submitted,

Mrs. C. C. Jowell, Cleburne.

Report of Fourth Vice-President

The year's work was begun early in September by sending to each county president a mimeographed form reflecting the title of the essay to be sponsored by our Auxiliary along with a suggested outline and bibliography. An atttached letter expressed the hope that every auxiliary in the state would either sponsor the suggested essay or make wide use of the Medical Film Service. We felt that if the auxiliaries themselves did not wish to use the films for their own group, perhaps through interpretation in their communities they could be used by various other groups.

Dr. R. B. Anderson has been most coöperative throughout the year with respect to keeping us informed about the available films, description of same and appropriateness for use with various groups. He even sent us a pamphlet of films and a description of each which was sent to each county president. We are most appreciative to Dr. Anderson for making the motion picture films available from the library of the State Medical Association of Texas.

Many of the county auxiliaries sponsored medical essays within their own boundaries. Some of the correspondence the Fourth Vice-President received indicated that this was being done on a local basis and a local prize would be given. In some instances they did not plan for these papers to be entered for state competition. Finally, twenty essays were submitted for consideration of the state prize, $10.00 in war stamps. Perhaps it will be interesting to show from which cities these essays were received: Waco, 11; Dallas, 3; Bay City, 4; Jacksonville, 1; Abilene, 1.

I take great pleasure in announcing that the judging committtee finally selected the paper, "What Physical and Mental Defects Disqualified so Many Men For Army Service—Why?" prepared by Marie Cagle, of Waco, Texas, as the best. This paper will be filed in the archives of the State Auxiliary. We were encouraged through our conferences with the teachers in the McLennan County public schools when they remarked how very enthusiastic the young people were over their participation in this particular essay contest They felt that the reading matter itself was stimulating, and many constructive comments came from the youngsters to the teachers. Although 310 essays were submitted from McLennan County, a committee of English teachers was appointed to sift this large number for the best papers. Finally eleven were sent to the Fourth Vice-President, who in turn sent them to the judging committee for local and state prize consideration.

Although the use of the film service was a rather new project with our organization this year, we have hopes that perhaps next and the following years it will be used more generally.

I take great pleasure in stating that throughout the state 16 health films were exhibited; 404 essays were secured, and 101 health talks were made in the educational work of county auxiliaries.

Respectfully submitted,

Mrs. Paul H. Power, Waco.

Report of Recording Secretary

The Recording Secretary has attended each meeting of the Executive Board and has endeavored to keep accurate minutes of the transactions. Proper material has been compiled and sent in for publication in the Journal.

Statistical forms, letters of instruction concerning annual reports and other letters incident to the work of the office have been written.

A complete record of each report has been catalogued and filed.

With the assistance of the President, the Recording Secretary has compiled a form for annual county reports. It is hoped that by revising the form from time to time it will soon be possible to eliminate other questionnaires sent out during the year. However, it must be borne in mind that the information gathered will not be of value to board members in compiling their reports unless each county auxiliary sincerely accepts the obligation to fill and return forms promptly and accurately.

I wish to express my gratitude particularly to the officers who sent in revised reports after receiving late data, to the Council Women who assisted in getting the county reports from their districts and to the small auxiliaries which resorted to mail to assure returning a complete record of work from their scattered members.

With such heart-warming coöperation of fellow officers and with the encouragement and assistance of our endeared president, I say with sincerity that it was a joy to serve.

Respectfully submitted,

Mrs. Mark H. Latimer, Houston.

Report of Corresponding Secretary

It has been a privilege and an honor to work so closely with our efficient President, Mrs. S. E. Thompson, and to coöperate with her in sending out the unusual amount of correspondence necessary for

the execution of the work of the Auxiliary during this fourth year of war.

Invitations were mailed and reservations made for the meeting of the Executive Board held in Kerrville, September 8, 1944.

I attended the Bexar County Auxiliary meeting in San Antonio, with Mrs. Thompson. This was a beautifully appointed luncheon held in the ball room of the Gunter Hotel.

Announcements and programs of the Executive Board meeting May 16, 1945, were mailed to all members.

The President's scrap book has been compiled and indexed.

Because of travel restrictions our President has had to resort to extensive correspondence; therefore the report this year far exceeds those of previous years. We have sent 9,139 pieces of mail, as follows: circular letters and cards, 5,771; personal letters, 224; membership cards, 3,100; telegrams relative to naturopathic bill, 31.

While the work has been heavy, it has been interesting, profitable and an inspiration to me. The friendships made and the close fellowship with my President will always remain as a sweet memory.

MRS. H. H. GALLATIN, Kerrville.

REPORT OF PUBLICITY SECRETARY

Fifty-six articles from county auxiliaries and two accounts of board meetings have been received and published in the JOURNAL during the past year. Fifty cards and letters have been written in connection with the work of the Publicity Secretary.

We appreciate the coöperation and generosity of Dr. R. B. Anderson, who has found space for us in the JOURNAL, even in the face of the paper shortage.

It is to be hoped next year all auxiliaries will have reports for the JOURNAL, even though they think their activities are not of special interest.

Respectfully submitted,

MRS. E. L. HOWARD, Fort Worth.

REPORT OF THE TREASURER

The Treasurer's report is completely covered in the report of the auditor for the period from May 6, 1944, to May 1, 1945, and which is submitted herewith.

Respectfully,

MRS. F. R. RUGELEY, Wharton.

REPORT OF THE AUDITOR

May 15, 1945

Mrs. F. R. Rugeley, Treasurer,
Woman's Auxiliary to the
State Medical Association of Texas,
Wharton, Texas.

Dear Mrs. Rugeley:

In accordance with your request, I have examined the records and books of accounts of your association; I have checked all of the cash receipts and disbursements, bank statements and deposit records. All of the records of the year's operation were complete and in good order.

The George Plunkett Red Fund was not included in this report, as the receipts and disbursement of such funds are not controlled by the Treasurer.

During the fiscal year, $2,000.00 was contributed to the State Library, a $1,000.00 U. S. series F Bond was purchased at $740.00. In addition to the bond purchased, $25.00 maturity value bonds, series F, were deposited by members with the Federal Reserve Bank for the Association.

The Memorial Fund now owns $8,025.00 maturity value of U. S. Bonds. These bonds are deposited for safekeeping with the Federal Reserve Bank at Dallas, as evidenced by the receipts of that bank, which were produced for my inspection.

The cash balance of $8,319.74, which I have examined through the bank statement, is on deposit in the Wharton Bank & Trust Co. at Wharton, Texas.

I submit herewith the following exhibit of schedules:

Name of Accounts	Balance 5-6-44	Increase	Decrease	Balance 5-1-45
General Fund	$ 701.30	$1,184.00	$1,125.25	$ 760.05
Student Loan Fund	5,374.87	1,201.88	2.00	6,574.75
Memorial Fund —Cash	370.84	1,214.35	775.75	809.44
—U. S. Bonds	5,213.00	740.00 (bought)		
		18.50 (gift)		5,971.50
Library Fund	1,092.50	1,085.00	2,002.00	175.50
Notes Receivable	6,796.82		1,271.69	5,525.13
Totals	19,549.33	5,443.73	5,176.69	19,816.37

We certify that, in our opinion, the above exhibit and the following supporting schedules represent a true and correct accounting of the year's operation and the financial condition of the Woman's Auxiliary to the State Medical Association of Texas.

Respectfully submitted,

ALEX HARRISON.

Statement of Operations

WOMAN'S AUXILIARY
TO THE
STATE MEDICAL ASSOCIATION OF TEXAS
May 6, 1944, to May 1, 1945

Cash Balance May 6, 1944:		
General Fund	$ 701.30	
Student Loan Fund	5,374.87	
Memorial Fund	370.84	
Library Fund	1,092.50	
Total		7,539.51
Receipts:		
General Fund	1,184.00	
Student Loan Fund	1,201.88	
Memorial Fund	1,214.35	
Library Fund	1,085.00	
Total		4,685.23
		$12,224.74
Disbursements:		
General Fund	1,125.25	
Student Loan Fund	2.00	
Memorial Fund	775.75	
Library Fund	2,002.00	
Total		3,905.00
Cash Balance May 1, 1945:		
General Fund	760.05	
Student Loan Fund	6,574.75	
Memorial Fund	809.44	
Library Fund	175.50	
Total		8,319.74

General Fund Operations

Cash Balance May 6, 1944		$701.30
Receipts:		
4th District	$ 17.00	
8th District	6.00	
7th District	17.00	
10th District	12.00	
15th District	28.00	
2nd District	2.00	
Angelina	9.00	
Austin-Waller	4.00	
Bell	15.50	
Brown	5.00	
Bexar	129.50	
Bowie-Miller	6.00	

Brazos-Robertson	$6.50
Brazoria	6.00
Caldwell	4.00
Cameron-Willacy	9.00
Cherokee	7.50
Cooke	7.00
Dallas	170.00
Ellis	7.50
El Paso	49.00
Falls	8.50
Galveston	31.00
Grayson	14.00
Hardin-Tyler	4.50
Harris	169.50
Harrison	4.00
Childress-Collingsworth-Hall	5.50
Henderson	5.50
Hidalgo-Starr	9.50
Hopkins-Franklin	8.00
Houston-Leon	6.00
Jefferson	37.00
Johnson	6.00
Kaufman	6.50
Kerr-Kendall-Gillespie-Bandera	13.00
Knox	2.00
Lamar	10.50
Lampasas-Burnett-Llano	3.00
Liberty-Chambers	7.50
Lubbock-Crosby	14.50
Madison-Walker	8.50
McLenan	8.50
Nacogdoches	7.50
Nueces	25.00
Potter	6.50
Smith	9.50
Ector-Midland-Martin-Howard-Glasscock-Andrews	7.50
Tarrant	88.00
Taylor-Jones	19.00
Terry-Lynn-Dawson-Gaines-Yoakum	3.00
Tom Green-Eight	13.00
Travis	25.00
Hunt-Rockwell-Rains	12.00
Washington	12.00
Wharton-Jackson-Matagorda-Fort Bend	11.50
Wichita	24.50
Total Receipts from Dues	$1,184.00
Total Cash	$1,885.30

Disbursements:

President's Expense and Stationery	$465.00	
Mrs. R. Moore, 4th Vice President '43-'44 (not deducted from balance audited 5/6/44)	6.75	
Mrs. R. Moore, Essay prize for 1943-44 (not deducted from balance audited 5/6/44)	25.00	
Dues to National Women's Auxiliary	566.75	
Dues to National Woman's Auxiliary	16.75	
Secretary's Expense	10.00	
Auditing	35.00	
Total Disbursements		$1,125.25
Cash Balance May 6, 1944		$5,374.87

Student Loan Fund Operations

Cash Balance May 6, 1944: $5,374.87

Receipts:

Donations:

Wichita	$ 5.00	
Smith $5.00—$5.00	10.00	
Washington	10.00	
Texas Medical Soc. P. Pres. Assoc.	50.00	
Dallas	25.00	
Bowie-Miller	5.00	
Harris	25.00	
Tom Green-Eight	5.00	
Liberty-Chambers	2.00	
Taylor-Jones	5.00	
Childress-Collingsworth-Hall	5.00	
Hunt-Rockwall-Rains	2.50	
Hardin-Tyler	1.00	
Cherokee	5.00	
Liberty-Chambers	2.00	
Angelina	2.50	
Total Donations		$160.00

Paid on Notes:

No.		
95	$100.00	
75	100.00	
28	216.00	
74 $50-$25	75.00	
82 & 91	250.00	
93 $25-$25	50.00	
84 $50-$100	150.00	
Total Paid on Notes		$941.00

Interest Paid:

No.		
95	$ 9.00	
75	15.00	
28	38.88	
74	9.50	
82 & 91	8.00	
84	20.50	
Total Interest Paid on Notes		$100.88
Total Receipts		$1,201.88
Total Cash		$6,576.75

Disbursement:

Returned Check (Liberty-Chambers)	$2.00
Cash Balance May 1, 1945	$6,574.75

Memorial Fund Operations

Cash Balance May 6, 1944 $ 370.84

Receipts:

Donations from Auxiliaries:

Mrs. Hutchins	$ 2.50	
Cherokee, $1.00-$1.00	2.00	
Past Presidents	10.00	
Mrs. Trigg	12.00	
Mrs. A. B. Pumphrey	25.00	
Dallas Co., $403.50-$198.00	601.50	
Smith, $5.00-$5.00	10.00	
12th District	5.00	
El Paso, $5.00-$5.00-$5.00-$2.50-$5.00-$5.00	27.50	
Mrs. H. R. Dudgeon	25.00	
Mrs. Henry Hoskins	5.00	
Dr. J. A. Watts, $2.50-$2.50	5.00	
Camelia Minsch	5.00	
Bexar, $25.00-$25.00	50.00	
Lamar	1.00	
Central Texas Auxiliary	8.50	
Childress-Collingsworth-Hall	1.00	
DeWitt-Lavaca	5.00	
Taylor-Jones	5.00	
Tom Green-Eight	5.00	
Hunt-Rockwall-Rains	3.00	
Kerrville	10.00	
Nueces	5.00	
Harris	10.00	
Liberty-Chambers	2.00	
Kaufman	5.00	
Hardin-Tyler	1.00	
Bowie-Miller	8.00	
Ellis	5.00	
Angelina	2.50	
Grayson	3.60	
Total Donations from Auxiliaries		$866.10

Paid on Notes:

M. S. B.	$292.00	
C. H. McC.	38.69	

Interest Paid on Notes:

M. S. B.	6.25	
C. H. McC.	11.31	
Total from Notes		$348.25
Total Receipts		$1,214.35
Total Cash		$1,585.19

Disbursements:

Charge Deposit on $50.00 Money Order	$ 0.25	
M. S. B. (refund for overpayment of loan)	10.50	
Federal Reserve National Bank (bond)	740.00	
Returned Check (Bexar County)	25.00	
Total Disbursements		$ 775.75
Cash Balance, May 1, 1945		$ 809.44

Library Fund Operations

Cash Balance May 6, 1944 $1,092.50

Library Fund Receipts:

Mrs. R. B. Homan	$ 5.00	
Mrs. A. B. Pumphrey	25.00	
Dr. S. E. Thompson	10.00	
Wichita County	10.00	
Tarrant	10.00	
DeWitt-Lavaca	5.00	
Kerr-Kendall-Gillespie-Bandera	10.00	
Liberty-Chambers	2.00	
Smith	3.00	
Smith	3.00	
Wharton-Jackson	2.00	
Total Library Fund Receipts		$ 85.00

Past Presidents Endowment Fund Receipts:

Mrs. W. R. Thompson	$ 25.00		
Mrs. G. V. Brindley	25.00		
Mrs. A. B. Pumphrey	25.00		
Dr. S. D. Whitten (Memorial to Mrs. Whitten)	25.00		
Mrs. F. F. Kirby	25.00		
Mrs. R. B. Haman	25.00		
Mrs. E. V. De Pew	25.00		
Mrs. H. R. Dudgeon	25.00		
Mrs. F. N. Haggard	25.00		
Mrs. Scott Applewhite	25.00		
Mrs. H. B. Trigg	25.00		
Mrs. O. M. Marchman	25.00		
Dr. Preston Hunt (Memorial to Mrs. Hunt)	25.00		
Mrs. S. H. Watson	25.00		
Mrs. P. R. Denman	25.00		
Mrs. Wm. Hibbitts	25.00		
Mrs. Sam E. Thompson	50.00		
Mrs. E. H. Cary	50.00		
Dr. and Mrs. John T. Moore	100.00		
Dr. and Mrs. A. C. Scott	100.00		
Dr. and Mrs. Joe Gilbert	50.00		
Dr. and Mrs. M. L. Graves	25.00		
Dr. and Mrs. S. C. Red (by Dr. and Mrs. Harrington)	25.00		
Dr. Sam Thompson	50.00		
Mrs. S. A. Collom, Sr.	25.00		
Dr. and Mrs. S. F. Harrington	50.00		
Dr. and Mrs. McReynolds (Dr. and Mrs. Harrington)	50.00		
Mrs. W. A. Wood (Dr. and Mrs. Harrington)	25.00		
Total Past Presidents Endowment Fund Receipts		$1,000.00	
Total Receipts			$1,085.00
Total Cash			$2,177.50

Disbursements:

Check Returned (Liberty-Chambers)	$ 2.00	
Dr. Anderson State Library	1,000.00	
State Library	1,000.00	
Total Disbursements		$2,002.00
Cash Balance May 1, 1945		$ 175.50

Notes Receivable

Note Number	Balance 5-6-44	Increase	Decrease	Balance 5-1-45	Interest Received
28	$216.00		$216.00		$38.88
82	150.00		150.00		8.00
91	100.00		100.00		
49	100.00			$100.00	
74	75.00		75.00		9.50
78	100.00			100.00	
M. F. 61	250.00			250.00	
30	463.38			463.38	
M. F. 83	169.00		169.00		6.25
M. F. 87	123.00		123.00		
84	150.00		150.00		20.50
1	175.00			175.00	
2	50.00			50.00	
69	28.75			28.75	
72	50.00			50.00	
73	50.00			50.00	
70	50.00			50.00	
71	50.00			50.00	
47	100.00			100.00	
51	100.00			100.00	
25	50.00			50.00	
35	105.70			105.70	
77	100.00			100.00	
93	98.00		50.00	48.00	
94	100.00			100.00	
37	96.25			96.25	
36	175.00			175.00	
98	100.00			100.00	
15	127.55			127.55	
95	100.00		100.00		9.00
57	100.00			100.00	
M. F. 16	377.00		38.69	338.31	11.31
17	124.94			124.94	
13	138.45			138.45	
75	100.00		100.00		15.00
13A	100.00			100.00	
13B	100.00			100.00	
39	100.00			100.00	
48	100.00			100.00	
M. F. 8	200.00			200.00	
11	125.00			125.00	
45	193.66			193.66	
53	100.00			100.00	
87	100.00			100.00	
58	150.00			150.00	
92	100.00			100.00	
90	100.00			100.00	
80	100.00			100.00	
89	$100.00			$100.00	
5	304.14			304.14	
—	75.00			75.00	
59	150.00			150.00	
81	150.00			150.00	
—	6.00			6.00	
Total	$6,796.82		$1,271.69	$5,525.13	$118.44

Annual Report of Parliamentarian

Due to transportation difficulties I was unable to attend the board meeting in September, and Mrs. Duckworth of Cuero very kindly assumed my duties. I was pleased to learn that no problem for the Parliamentarian was presented at that meeting. Again in May I was unable to attend the called board meeting in San Antonio. Mrs. Scott C. Applewhite graciously served.

I have sent one copy of the Constitution and By-laws to one of our auxiliaries and have had only one letter of inquiry.

Mrs. E. W. Jones, Wellington.

At this time the reading of reports was interrupted to permit Mrs. Frank Haggard to make announcements in regard to the day's activities.

Reports of the Councilwomen were then received.

Report of District Two Council Woman

There has been little activity in District 2 this year. The Six-County Auxiliary is the only organized group, and it has held only two meetings. There are two members-at-large in the former Nolan-Fisher-Mitchell County Auxiliary.

The inactivity is due to the great distances in this part of the country, together with the shortage of gasoline and the absence of the majority of the doctors' wives who are away with their husbands in the services.

I have contacted, either personally or by letter, a great many of the members and former members, and brought the present aims and problems of the Auxiliary to their attention. There has been no lack of interest, except in the physical functioning of the separate groups; and we feel that all of the societies will return to their normal activities as soon as the war situation will permit.

Mrs. T. D. Young, Roscoe.

Report of District Three Council Woman

Eighty-nine letters were written to the wives of doctors in my District, asking them to become associate members in the State Medical Auxiliary. The response netted twenty-two members at large.

Mrs. E. M. Blake, Lubbock.

Report of District Four Council Woman

District Four is made up of twenty-one counties. It is one of the largest districts of the state. Of these twenty-one counties, only six are organized. The territory being so vast, together with gasoline rationing, curtailed any personal contacts that might otherwise have been made with these unorganized counties this year.

Of forty-three letters sent to non-members inviting them to become members at large, fifteen responded promptly. Another three wrote to say that they had become affiliated with their nearest auxiliary. Seventeen members at large were secured in all. We have thirty-six active members.

On September 25, 1944, the Fourth District Auxiliary met in San Angelo. We had twenty-five members and one guest, our state president, Mrs. Sam Thompson of Kerrville, present for the luncheon and business meeting. With us, too, was Mrs. H. B. Allen of Brownwood, second vice president of the State Auxiliary. An election of officers was held, and Mrs. Thompson made an inspiring talk on the "Aims and Accomplishments of the State Organization."

Tom Green Eight-County Auxiliary has increased its membership by seven this year. All of these

women are doing their share of war work in addition to their regular civic and community welfare work.

As no report of war work has come to me from the other two organized auxiliaries of this District, only that of Tom Green Eight-County is given. The total number of hours given to war work for the year was 3,964. Eighteen different services were participated in. Red Cross surgical dressings headed the list with 2,005 hours, and U. S. O. work totaled 1,304 hours. Members of the Gray Ladies organization gave 335 hours, and 160 hours were given in the sewing room. One of Tom Green County's members is County Health Nurse, and she spent 85 hours teaching Nurse's Aid classes.

As councilwoman, I wish to express my thanks to the members of this District for their splendid coöperation and help this year.

Mrs. Victor E. Schulze, San Angelo.

Report of District Five Council Woman

Seventeen members in District 5 have paid dues for 1945-1946. No trips were made over the district during the past year because of the war situation.

Mrs. J. L. Pridgen, San Antonio.

Report of Seventh District Council Woman

This district contains three county medical auxiliaries—Caldwell, Lampasas-Burnet-Llano, and Travis.

On account of the war situation no attempt was made this year to organize auxiliaries in the remaining counties of the district—Williamson, Hays-Blanco, Bastrop and Lee counties. However, an opportunity was given to all wives of physicians in these counties to become members-at-large of the State Medical Auxiliary. In answer to the thirty-eight letters to these ladies I received nineteen responses and welcomed into the auxiliary as members-at-large four from Bastrop County, five from Hays and Blanco Counties, two from Lee County, and eight from Williamson County.

When our State President, Mrs. Sam E. Thompson of Kerrville, was guest of honor at a luncheon in Austin on February 20, the presidents of the organized auxiliaries in the district were invited to attend.

Mrs. John A. Crockett, Austin.

Report of Eighth District Council Woman

The Eighth District is composed of eleven counties, representing six medical societies, but functions with Districts Nine and Ten as the South Texas District Auxiliary. Wharton, Jackson, Matagorda, Fort Bend, DeWitt, and Lavaca Counties are coöperating as two auxiliaries. These two auxiliaries have held their own meetings. Through the courtesy of Harris County Auxiliary streamlined business meetings have been held for Districts 8, 9, and 10.

State President Mrs. S. E. Thompson, with this Council Woman, visited the Victoria group, and six doctors' wives affiliated as members-at-large. Invitations to each doctor's wife in District 8 have been extended through the mails for their becoming members-at-large, where auxiliary organization was impossible. Doctors' wives are aggressive in leadership in Red Cross and other war services.

As Council Woman, State Executive Committee meetings have been attended, and extensive correspondence with local representatives in Congress and the State Legislature has received our attention from this section.

Mrs. E. H. Marek, Yoakum.

Report of Ninth District Council Woman

As council woman of District 9, I am happy to report the organization of one new county auxiliary, that of Brazoria County.

I have written several letters to each of the counties in this district but have been unable to visit them because of transportation difficulties.

The district work is holding up remarkably well under the stress of the times.

Respectfully submitted,

Mrs. L. L. D. Tuttle, Houston.

Report of Tenth District Council Woman

In accordance with Mrs. Ramsey Moore's appeal for organization, the Council Woman of District 10 reports as follows:

Each organized county was contacted by letter. Seventy of the State President's form letters were Eleven became members at large, and sent their dues sent to doctor's wives of unorganized counties. in response.

The responses may appear small in relation to the number of letters sent out, but in view of the war and its confusion this is deemed real progress in our organization campaign of the Woman's Auxiliary.

Respectfully submitted,

Mrs. E. C. Ferguson, Beaumont.

Report of Eleventh District Council Woman

The Eleventh District Auxiliary met April 5, 1945, at Jacksonville. Reports were received from county auxiliaries, and the following officers were elected: Mrs. L. B. Windham, Tyler, president; Mrs. R. L. Page, Tyler, corresponding secretary and treasurer; Mrs. George Francis, Rusk, recording secretary; and Mrs. R. C. Crawford, Rusk, publicity chairman.

Respectfully submitted,

Mrs. L. B. Windham, Tyler.

Report of Fourteenth District Council Woman

The Fourteenth District contains eight county auxiliaries, which have a total membership of 478.

Two meetings of the Fourteenth District Auxiliary were held during the past year, the first June 20, 1944, at Greenville. All county auxiliaries in the district were represented at this meeting and gave excellent reports, showing that all of their members were active in war work, such as support of blood bank, making of surgical dressings, knitting, selling war bonds, etc. At this meeting the district auxiliary voted to buy a $25.00 war bond.

The second meeting was held December 13, in Denison. At this meeting excellent reports were received from all county auxiliaries in the district on war work done during the summer and fall. Grayson County's report was outstanding, in connection with support of a blood bank. They secured 5,118 donors, who gave 4,312 pints of blood. It was voted to donate the $25.00 war bond purchased after the June meeting to the Memorial Fund of the State Auxiliary.

Officers of the Fourteenth District Auxiliary elected at this meeting are: Mrs. C. W. Robinson, Paris, president; Mrs. Cecil Patterson, Dallas, first vice president; and Mrs. R. S. Usry, Dallas, secretary-treasurer. Dues have been collected from all members to date. Many letters have been written during the year to all members in the district.

Respectfully submitted,

Mrs. S. M. Hill, Dallas.

Report of Fifteenth District Council Woman

The Fifteenth District is composed of ten counties. This year, due to complying with the gas rationing, we decided not to have our yearly meeting at the time the doctors met, but I have kept up correspondence with different members, and with the help of Mrs. H. H. Neihuss, of Longview, secretary and treasurer of our District Auxiliary, we have been very successful in keeping in touch with the regular members and have been glad to welcome a total of 20 new members at large.

Wives of doctors are still active with the Red Cross and other war projects.

Bowie-Miller Counties Auxiliary was very fortunate in having a visit from our Texas State President, Mrs. S. E. Thompson, of Kerrville, in October, 1944, when a tea was given by the Auxiliary in her honor at the home of Mrs. N. B. Daniel, sharing honors with Mrs. A. C. Shipp, Arkansas State President of Little Rock.

We have thirty-six members with paid up dues.

Respectfully submitted,

Mrs. R. C. Cross, Texarkana.

The meeting recessed at high noon to enjoy a unique style show. Members of the Bexar County Auxiliary modeled dresses of all periods from the 1880's to the 1920's. The finale consisted of three bridal dresses. A "no-host" luncheon followed.

Business was resumed at 1:30 p. m. with reports from standing committee chairmen as follows:

Report of Legislative Chairman

Due to the importance of the legislative program, the Legislative Committee and the President of the State Auxiliary agreed that all communications to auxiliaries over the state would be given more consideration coming from the State Medical Association headquarters located in Fort Worth. Three such letters have gone out, and twelve telegrams were recently sent to auxiliaries in different parts of the state, asking members to wire or write at once to their senators to vote against the Naturopath bill.

Thirty-four counties reported having sent letters and having distributed literature and made talks on our legislative program. These figures are probably not accurate, but records show 6,591 communications through the Medical Auxiliary.

Mrs. S. H. Watson, Waxahachie.

Report of Library Fund Committee

The Library Fund Committee wishes to express its appreciation for the coöperation received from the auxiliaries during the year. The contributions to this fund did not meet our expectations. However, we feel encouraged, for we believe the interest and enthusiasm in this outstanding library is increasing.

We are happy to report the Presidents' Library Endowment Fund is completed. This fund was started last year by Mrs. S. F. Harrington, and certainly merits special mention. Of the twenty-seven contributors, nine are past presidents of the State Medical Association. Congratulations to those who have made possible this fund.

It has been a pleasure to have served this committee and it is our sincere wish that the year may bring the return of peace, and all those things which we hold dear.

Presidents' Library Endowment Fund	$1,000.00
Dr. and Mrs. S. E. Thompson..... Hulda Real Memorial	10.00
Dewitt-Lavaca County Medical Auxiliary ..... Dr. H. H. Brown, Sr., Memorial	5.00
Kerr-Kendall-Gillespie-Bandera Auxiliary	10.00
Liberty-Chambers Auxiliary.....	2.00
Wharton-Jackson-Matagorda-Fort Bend Auxiliary ..... F. F. Kirby, Waco, Memorial	2.00
Smith County Auxiliary.....	6.00
	$1,035.00

Mrs. Lester Keyser, Chairman,
Mrs. S. F. Harrington,
Mrs. W. R. Snow,
Mrs. L. P. Gutman.

Report of Historian

The emergencies of war have so limited the activities of some of our auxiliaries that the pages of our history have necessarily grown thinner; but if each individual service could be accounted we would have a book filled with valiant and patriotic deeds of doctors' wives, who have gallantly met domestic, civic, and national needs.

Our history will miss the names of some of our members whose husbands are in the service. Many of them have already written their lines in sweat and tears. When we review the history of 1944-1945, let us remember that the most sacrificial deeds of history are often unrecorded because of battle smoke.

It is worthy of historical note that our auxiliaries in large centers have achieved a program of outstanding undertakings, commensurate with the requirements of our country at war, while small organizations, over wide areas, bring much credit to our pages, because their splendid loyalty has held membership together under difficulties. In some localities the entire year's business has had to be discharged at one meeting.

Because of this unusual and challenging year, the president has asked that the highlights of some of our small auxiliaries be mentioned in this report.

Tom Green County, with a membership of twenty-two, carried out a project of financing the recruiting of nurses and passed their quota of eighteen. Twenty-three applications were sent to Washington and three rejected. They also sponsored the infantile paralysis "March of Dimes" with receipts amounting to $2,048.00.

Childress-Collingsworth-Hall counties, with a membership of eleven, obtained forty-eight subscriptions to *Hygeia*, giving themselves a place toward leadership in health education.

Travis county, with a membership of fifty-one, contributed to our memorial ideal by sending $5 a month to a doctor's widow in an old woman's home. At one meeting each member brought contributions for a needy family.

Kerr-Kendall-Gillespie-Bandera counties, with thirty-eight members, sponsored the sale of Christmas seals, giving patch tests and x-ray examinations with follow-up x-ray studies on approximately 600 children. This work is to be extended to all schools, including Negro schools.

Hidalgo-Starr counties, with twenty members, sponsored five health talks—a program that would do credit to a larger auxiliary.

Henderson county, with a membership of eleven, sent twenty-two letters to congressmen and senators.

Nueces county is compiling a list of names of blood donors to be made available to the Corpus Christi physicians and hospitals for emergencies. They have made this their wartime project.

DeWitt-Lavaca counties report recruiting fifteen cadet nurses.

Austin-Waller counties, with a membership of eight, report 100 per cent Journal readers.

Liberty-Chambers counties, with a membership of fourteen, secured *Hygeia* subscriptions that netted their auxiliary $22.50. They have one member who is responsible for organizing a youth movement.

Smith County, with nineteen members, wrote 85 letters to Washington.

Johnson county, with eighteen members, was responsible for bringing the mobile blood bank to Cleburne. They contributed three days' service.

Hunt-Rockwall-Rains counties have thirty-two members. They report their theme for the year was "Coöperation With Federated Clubs." Their year book reveals that they open each meeting with a lesson from the Bible.

Grayson County, with a membership of twenty-seven, has made outstanding history in their work with the Buchanan Foundation of Dallas by collect-

ing blood to be processed into plasma. Under the auxiliary sponsorship, 594 pints of blood were obtained for civilian use; and coöperating with the Red Cross, 3,518 pints of blood were obtained from 4,579 volunteer donors. On November 21, 1944, following an explosion of butane gas at Denison, 122 pints of blood were rushed to the Denison Hospital, saving many lives.

Bowie-Miller Counties, with a membership of thirteen and seventeen, respectively, gave *Hygeia* to fourteen schools and contributed $36.50 for a child in a rest camp for underprivileged children.

Galveston County celebrated its twenty-fifth anniversary with a silver tea. Fifteen of their original twenty members were present. They now have ninety members.

Washington County is remembering our wounded at Temple by sending a book a month to the McCloskey General Hospital.

Hopkins-Franklin Counties, just one year old, report three projects this year: cadet nursing, legislation, and public relations.

Wichita County Auxiliary had for their main project assisting the Wichita Tuberculosis Association in purchasing clothing for patients sent to the State Sanatorium. They donated $15.00 to the sale of Christmas seals. The president commented on their marked spirit of unity, with forty-six paid members.

No doubt many other small auxiliaries have made noble contributions but they have not been reported to the historian.

A letter has been written to each county president asking for an informal report, a year book, and all newspaper clippings of auxiliary events. The number of responses has fallen short of a historian's goal and further effort will be made to include every auxiliary in the year's history.

All auxiliary contributions to the TEXAS STATE JOURNAL OF MEDICINE have been collected for our history, and the reports in the June number will be added before the record is sent to the archives.

The historian is indebted to Mrs. George Turner, past historian, for gracious assistance, and to Mrs. Sam Thompson, our president, for her constant interest in this feature of our work. It is such team work and organization loyalty that creates the worthy and lasting pages of our history; not for the archives alone, but for the united usefulness and growing strength of doctors' wives for our uncertain tomorrow.

Respectfully submitted,

MRS. MARVIN DUCKWORTH, Cuero.

REPORT OF MEMORIAL FUND CHAIRMAN

It has been my privilege to serve the State Auxiliary again as Chairman of the Memorial Fund.

With permission of the Executive Board your committee has purchased two $1,000.00 bonds at $740.00 each. The bonds are deposited in the Federal Reserve Bank of Dallas. A $25.00 bond also was received as a donation from the North Texas District Auxiliary.

They bear the same signatures as do all the other seven bonds belonging to the Memorial Fund. Thus we have a total investment of $7,678.75 in bonds with $140.00 left in the checking account. A list of the serial numbers with dates of purchase and series letter has been sent to the Treasurer to be pasted in her permanent book. Each signee also has a copy.

We feel this money is serving a double purpose for the time being. It is a loan to the government and at the same time earning interest for the Memorial Fund.

There have been fewer large donations this year, but more small ones. To the auxiliaries and individual members who contribute regularly and generously to this fund, I wish to express sincere thanks. I know you feel it is important and an altogether worthy project of the whole State Auxiliary. To those who have not had a part in this phase of our work I do wish I could make an appeal to you commensurate with the wide expanse of all Texas and as deep or as high as the love we should have one for another.

It belongs to us all, is available to the wife or family of any doctor who is or has been a member of the State Medical Association of Texas. It is the only State Fund provided by an organized group that is intended to benefit the doctor's family.

May I urge each individual member to think it over and ask yourself this question—Is there really a need for this fund? If so, there is a great need and a need for it to be of such an amount as to yield sufficient interest to be usable.

That means that more of us should give, and all of us must increase our donations. I have set myself a goal of at least two more bonds next year, and I hops you will help me make the year 1945-1946 the very best year we have ever had.

Respectfully submitted,

MRS. O. M. MARCHMAN, Dallas.

REPORT OF RESOLUTIONS CHAIRMAN

Whereas, the Woman's Auxiliary to the State Medical Association of Texas having been denied their annual meeting in Galveston by the Office of Defence Transportation, because of the urgent need of transportation for our soldiers; be it

Resolved, that the Woman's Auxiliary express its appreciation to our President for her very capable and efficient leadership, and to the Executive Board for their loyal support, and to those who have worked so diligently regardless of the unusual conditions imposed on them by war; and, be it further

Resolved, that the Woman's Auxiliary to the State Medical Association of Texas go on record as opposing any legislation interfering with the private practice of medicine; and be it further

Resolved, that we are unalterably opposed to the Wagner-Murray-Dingell Bill now before Congress. We respectfully request and urge our Congressmen and Senators to oppose the passage of this bill.

MRS. RICHARD KEYS, Amarillo.

REPORT OF REVISIONS COMMITTEE

The Revisions Committee has been inactive this year. No suggested changes were presented to the committee.

After a careful reading, it was felt that no changes in the constitution or by-laws were necessary, or advisable, at this time.

Respectfully submitted,

MRS. JOHN B. FOSTER, Chairman, Houston.

REPORT OF REFERENCE COMMITTEE

Since nothing has been referred to the Reference Committee that required action, there has been no activity on the part of this Committee for the year 1944-1945. However, it has been a special privilege to lend coöperation to our gracious, far visioned president, who has led us capably and confidently under most baffling war conditions.

MRS. P. R. DENMAN, Chairman, Houston.

REPORT OF GEORGE PLUNKETT RED STUDENT LOAN FUND CHAIRMAN

As chairman of the George Plunkett Red Student Loan Fund, I wish to submit the following report.

I attended the Executive Board Meeting in Dallas in May, 1944.

I have written fifty or more letters and have received and deposited to the Trust Fund in the

South Texas National Bank, Houston, Texas, the following gifts:

Miss Lel Red	$18.40
Mrs. Katharine Parker	19.00
Mrs. W. E. Ramsay	6.00
Taylor-Jones Counties Auxiliary	5.00
Harris County Auxiliary	25.00
Hattie Hunt Auxiliary of Childress-Collingsworth-Hall Medical Society	1.00
Liberty-Chambers Counties Auxiliary	2.00
Neuces County Auxiliary	5.00
Hardin-Tyler Counties Auxiliary	1.00
Angelina County Auxiliary	2.50
Total	$84.90

Due to the fact so many boys are in the service there have been few requests for loans.

At present there are six outstanding loans, the total value of which is $1,085.83.

The book value of trust as of March 1 is $4,716.54.

Most of the boys who have secured loans are in the service. We have had no special news from them, but the bank reports all have met the payments due on their notes.

The bank report for the year on the trust fund follows:

Respectfully submitted,

MRS. WM. E. RAMSAY, Houston.

REPORT OF SOUTH TEXAS COMMERCIAL NATIONAL BANK, HOUSTON, ON GEORGE PLUNKETT RED STUDENT LOAN FUND

Statement of Receipts and Disbursements from September 1, 1944, to March 1, 1945

Date	Trust No.	DESCRIPTION	INCOME CASH Debit	INCOME CASH Credit	INCOME CASH Balance	PRINCIPAL CASH Debit	PRINCIPAL CASH Credit	PRINCIPAL CASH Balance
Sept. 1, 1944	33	Balance Transferred			$ .00			$671.51
Sept. 11, 1944	33	Addition to Fund Mrs. Katherine Red Check for $8.00 from Mrs. W. E. Ramsay			.00	$ 8.00		679.51
Sept. 20, 1944	33	Interest to 9-16-44 A/C C. F. B. Note—Payment in Full	$17.50					
		C. F. B. Note			17.50	200.00		879.51
Oct. 7, 1944	33	Interest to 10-1-44 A/C E. B. F. Note	7.18					
		Payment Note E. B. F.			24.68	20.00		899.51
Dec. 29, 1944	33	Annual Fee to Bank as Trustee Being ¾ of 1% of Corpus for Period Ending 12-31-44		$35.53	10.85cr.			899.51
Jan. 18, 1945	33	6 Mos. Int. Savings Acct. No. 29681 So. Texas Coml. Natl. Bank	5.00					
		Savings to Principal		5.00	10.85cr.			899.51
Jan. 22, 1945	33	Addition to Fund H. Lel. Red Check for $10.00 from Mrs. W. E. Ramsey			10.85cr.	10.00		909.51
Jan. 26, 1945	33	Transferred from Principal to Income	10.85		.00		$10.85	898.66

Recapitulation:

Book Value of Trust as of September 1, 1944, Statement Rendered		$4,714.50
Income Collected Period September 1, 1944, to March 1, 1945		29.68
Additional Deposits to Trust Account		18.00
		$4,762.18
Less:		
Transfer to Income from Savings (Shown September 1, 1944, Stmt.)	$10.11	
Annual Fee to Trustee	35.53	45.64
Book Value of Trust as of March 1, 1945, Detail of Trust Assets Attached		$4,716.54

Notes Receivable:

3	J. W. A. Due 9-15-43 Interest from Date	$ 200.00
3	J. B. Due 9-27-45 Interest from 9-27-41	200.00
3	W. V. B. Due Now Interest from 9-28-39	160.00
3	F. B. F. Due 9-13-40 Interest from 10-1-44	125.83
3	D. C. L. Due 7-28-45 Interest from 7-28-41	200.00
3	O. J. R., G. T. R., F. B. Co-signers Due 10-10-45 Interest from 10-10-41	$1,085.83

Savings Account:

South Texas Commercial National Bank Savings Acct.	$2,732.05

Cash:

Principal Cash on Hand	$ 898.66
Book Value of Trust as of March 1, 1945	$4,716.54

Report of Archives Committee Chairman

This marks the thirteenth annual report of the Archives Committee.

War conditions slowing up county and district activities, has slowed up the work of the Archives Committee. Few yearbooks have been sent in. Very little new data have been received. Every letter has been a joy and has been appraised at full value.

We are happy to report for the first time the receipt of the Historical Reports for 1941-1942, and also 1942-1943 covering the administrations of Mrs. S. F. Harrington and Mrs. P. R. Denman, by Historians Mrs. T. D. Vaughn and Mrs. R. A. Hasskarl. These reports are not only fine tributes to the fine work of the Historians but are "Works of Art" as well.

The Historian's Book for 1943-1944 was received today. This lovely piece of work was done by Historian Mrs. George Turner of El Paso, covering Mrs. Pumphrey's administration.

All we can do during these trying times is to hold on to our aims and ideals and to "Hold the Ropes" till the tide turns, and this we will do.

Let me urge that all counties and districts preserve their Record Books. They will be invaluable to those who come after us as data references. Let all History Books carry the date on the outside cover, without fail.

Mrs. W. A. Wood, Waco.

Report of Texas Research Chairman to S. M. A.

Letters were written in September to county presidents, requesting interesting papers used as programs for their auxiliary, to be sent to me to be forwarded to the Southern Medical Auxiliary Research Library. They were told that material was available for their use to aid them in planning their programs.

I am sorry to report no requests have been received for material for programs and no papers have been received.

Mrs. Richard C. Bellamy, Daisetta.

Report of Public Relations Chairman

A. *Promotion of Health Education.*
One hundred and eighty-seven health talks were given over the state.
Radio programs were sponsored.
Prizes were given for Health Essay contest.
Talks have been made to High School and Junior College girls, giving them the details of U. S. Cadet Nurse Corps.

B. *Promotion of Child Health and Child Care.*
Three thousand hours and money has been donated to Day Nurseries.
Help has been given in pre-school examinations.
Two hundred eighty hours were spent in the study of nutrition.

C. *Nurses Aid and Home Nursing Groups* have been taught by Auxiliary members.

D. *Practical Help to Medical Families in Service Camps.*
Help has been given in locating living quarters.
Home entertainment has been provided for medical families in camps.

E. *Coöperation in all forms of Civilian Defense and War Activities.*
6,768 hours have been given in drives for funds.
18,604 hours spent in rolling bandages.
19,162 hours spent in Nurses Aid.
1,214 hours spent as Grey Ladies.
7,395 hours spent at U. S. O. at hostesses and at canteens.
557 hours given to the Red Cross Blood Bank.
6,266 hours spent in knitting and sewing.
684 hours spent in learning home nursing.
1,320 hours spent at Red Cross Headquarters in typing and filing.

F. *Legislation.*
We have no accurate record of the number of telephone calls, telegrams, letters and postal cards written to our State Senators and Representatives expressing our views on bills pending in the Legislature of interest to the medical profession, but the number was large.

I should like to call attention to the News Bulletins sent out by the Public Relations Committee of the State Medical Association of Texas. Please read them and act.

Mrs. L. B. Windham, Tyler.

Report of Texas Bulletin Chairman

The following county auxiliaries reported subscriptions to *The Bulletin* as follows: Childress-Collingsworth-Hall, 1; Tom Green, 22; Dewitt-Lavaca, 2; Wharton-Jackson-Matagorda-Fort Bend, 4; Washington, 2; Harris, 5; Hardin-Tyler, 1; Taylor-Jones, 2; Hopkins-Franklin, 8; Dallas, 4; Bowie, 2.

No reports were received from twenty-one county auxiliaries.

Respectfully submitted,

Mrs. R. C. Whidden, Gainesville.

Report of Memorial Committee Chairman

Early in March, letters were written to all county presidents requesting the names of deceased members of the current Auxiliary year.

To date five deaths have been reported, and letters have been written to the bereaved families.

Our hearts are filled with sorrow over this loss but we rejoice that so small a number have been taken from us.

It has been a pleasure to serve the Auxiliary as chairman of this committee.

Respectfully submitted,

Mrs. John T. Moore, Houston.

Report of U. S. Cadet Nurses Recruitment Committee Chairman

Twelve auxiliaries reported active participation in the nurses recruitment project. Eleven of the 17 were successful in obtaining recruits with a total of 96 for the state. Recruits secured by counties, were as follows: Tom Green, 23; Kerr-Kendall-Gillespie-Bandera, 19; Dewitt-Lavaca, 15; Taylor-Jones, 11; Wichita, 10; Ector-Midland-Martin-Howard-Glasscock, 7; Liberty-Chambers, 5; Wharton-Jackson-Matagorda-Fort Bend, 3; Angelina, 2; Washington, 1.

Following graduation of high schools June 1, I am sure we will have many more recruits as the result of work done during the year. I appreciate the coöperation given me in this activity and those who have worked have the deep satisfaction of volunteer service for others.

Mrs. J. E. Hogan, Big Spring.

Report of Advisory Committee Chairman

It has been a privilege for me to serve as Advisory Chairman this year, for it has given me the pleasure of conferring with Mrs. Thompson on Auxiliary objectives, and of attending the Board Meeting in Dallas in May, and in Kerrville in September.

The helpful coöperation of the President of the Advisory Council of the State Medical Association and the Texas State Journal of Medicine has been enjoyed and appreciated.

Mrs. S. F. Harrington, Dallas.

Special Advisory Committee

I have no report from the Special Advisory Committee. I have met twice with the president, but only for informal discussions.

Mrs. Wm. Hibbitts, Chairman, Texarkana.

A complete roll of county auxiliaries was not made. Their annual reports had been collected and filed by the secretary. However, the following coun-

ty presidents were in attendance, and gave narrative reports of their year's work: Mrs. W. S. Red, Jr., Harris County; Mrs. T. E. Edwards, Nueces County; Mrs. L. B. Windham, Smith County; Mrs. C. O. Patterson, Dallas County; Mrs. J. R. Nicholson, Bexar County; Mrs. S. H. Watson, Ellis County; Mrs. R. F. Thompson (pro tem), El Paso County.

After the annual reports were concluded, they were accepted as read on motion of Mrs. O. M. Marchman, Dallas.

Organizational awards were read by Mrs. Ramsey Moore, Dallas, first vice president. Other awards were read by the secretary. The president announced that all awards were to be presented by mail.

The following awards were made:

MEMBERSHIP

Hopkins-Franklin (one year old) won the silver loving cup with a 77% increase in membership.

Liberty-Chambers	36%	Membership 1 to 25
Kaufman	30%	
Brown-Comanche-Mills-San Saba	25%	
Tom Green-Eight County	18%	Membership 25 to 50
Lubbock-Crosby	16%	
Grayson	9%	
Jefferson	39%	Membership 50 to 100
McLennan	12%	
El Paso	9%	
Tarrant	28%	Membership over 100
Harris	2%	
Dallas	2%	

HYGEIA SUBSCRIPTIONS

Childress-Collingsworth-Hall	48	Membership 1 to 25
Liberty-Chambers	33	
Nueces	26	Membership 25 to 50
Kerr-Kendall-Gillespie	22	
Jefferson	52	Membership 50 to 100
El Paso	31	
Dallas	155	Membership over 100
Harris	99	

PHYSICAL EXAMINATIONS

Hidalgo-Starr	50	Membership 1 to 25
Grayson	58	Membership 25 to 50
Tom Green-Eight County	52	
El Paso	77	Membership 50 to 100
Dallas	656	Membership over 100

100 PER CENT JOURNAL READERS

Dawson-Lynn-Terry-Gaines-Yoakum	
Childress-Collingsworth-Hall	Cherokee
Austin-Waller	Henderson
Liberty-Chambers	Hopkins-Franklin

Honorable Mention

Tom Green-Eight County 91%, McLennan 75%, Harris 40%.

At this time the Historian, Mrs. Marvin Duckworth, Cuero, gave "High-Lights of County Auxiliary Work."*

Memorial Services

Mrs. John T. Moore, Houston, Chairman of Memorial Services, placed an arrangement of gladioli on the rostrum and paid a fitting tribute to five deceased members.

Five of our members have passed away since our last meeting:

Mrs. W. Luther Parker, Wichita Falls
Mrs. O. C. Ahlers, Sherman
Mrs. Herbert T. Hayes, Houston
Mrs. E. D. Townsend, Eastland
Mrs. E. V. Powell, Waco

"They never can leave us, our beloved who have passed
Through the gateway of death to the sunlight above
For a thousand sweet memories are holding them fast—
To the places they blessed by their presence and love.

"In person they have left us all too soon, but their spirits rest in the Celestial City not made with hands, where joy reigns forever.

"They are not dead; they're more alive than ever!
The melody of moon and stars and sun
Now is ringing in their ears...
It's the music of the Spheres...
And the joys of Heaven, for them,
Has just begun."

Mrs. John T. Moore,
Mrs. W. R. Thompson,
Mrs. Victor Keidel.

President Mrs. Thompson called for the report of the Nominating Committee, explaining the unusual circumstances existing—that of electing officers at a called meeting of the Executive Board. Mrs. Thompson reported that she had conferred with her two Advisory Committees and with the Trustees and President of the State Medical Association.

Upon motion of Mrs. Scott C. Applewhite, San Antonio, it was voted that each county auxiliary and each state officer not present be notified by their delegates and by mail of this election, asking that they ratify the action of the board.

Mrs. A. B. Pumphrey, Fort Worth, Chairman of the Nominating Committee, presented the following nominees:

President—Mrs. C. B. Alexander, San Antonio.
President-elect—Mrs. George Turner, El Paso.
First Vice President—Mrs. S. M. Hill, Dallas.
Second Vice President—Mrs. L. W. O. Janssen, Corpus Christi.
Third Vice President—Mrs. Troy A. Shafer, Harlingen.
Fourth Vice President—Mrs. Mark H. Latimer, Houston.
Treasurer—Mrs. F. R. Rugeley, Wharton.
Recording Secretary—Mrs. Paul H. Power, Waco.
Corresponding Secretary—Mrs. Wilbur Robertson, San Antonio.
Publicity Secretary—Mrs. E. L. Howard, Fort Worth.
Parliamentarian—Mrs. W. R. Klingensmith, Amarillo.

There were no further nominations from the floor. On motion of Mrs. W. S. Red, Jr., Houston, it was voted to close nominations and instruct the secretary to cast a unanimous vote for the slate presented. The secretary cast the vote and the president declared the election.

On motion of Mrs. P. R. Denman, Houston, it was voted to instruct the corresponding secretary to send notes of regret to those board members who found it impossible to attend the called meeting.

Mrs. S. F. Harrington presented the newly elected officers and installed them with a brief word to them and to the retiring president. Mrs. Thompson presented the gavel to Mrs. C. B. Alexander, and the new State President responded graciously.

Acceptance of Gavel by Incoming President

In accepting this gavel, I pledge my loyal service to this Auxiliary and my best efforts to further the interests of the medical profession. With the united and hearty support of each member of this Executive Board, the Auxiliary will continue in its progress and achievements. Mrs. Thompson, I congratulate you on the contributions you and your Board have made to our Auxiliary this year. Because of your services and the services of the presidents who have gone before you, we have an auxiliary with a firm foundation, unshaken by the storms of time. Each president has been like that virtuous woman who "looketh well to the ways of her household and eateth not the bread of idleness. Her children rise up and call her blessed; her husband also he praiseth her."

It is because our Auxiliary has always gladly accepted every opportunity to be of service to our State Medical Association that we have grown and

*See Report of Historian, page 95.—Recording Secretary.

developed with the years. In the beginning our chief function was furnishing entertainment for doctors' wives at medical conventions and promoting friendship among doctors' families. Today, our most important contribution is educating ourselves and enlightening the public as to the purpose and accomplishments of American Medicine.

The Auxiliary needs every doctor's wife as an active member, for every doctor's wife is a molder of public opinion through her social and club contacts. But the doctor's wife must know whereof she speaks, or she will harm rather than help her husband's profession. The Auxiliary not only acts as a training school, but it offers the opportunity for united action. The voice of 2,200 Texas women cannot help but be heard.

To speak intelligently upon subjects pertaining to health and medicine, we must not only attend our Auxiliary meetings, but we must read our official publications: *Hygeia,* the TEXAS STATE JOURNAL OF MEDICINE, *The Journal of the A. M. A.,* and *The Bulletin.*

Hygeia is the finest possible instrument for creating appreciation for scientific medicine. Let us see that it is in every doctor's office, that it is used in our schools and Red Cross classes, and that it is placed in all public reading rooms. It would be a fine gift for our Representatives and Senators.

The Bulletin is our own Auxiliary magazine, and is the necessary equipment for every member of the State Executive Board and for every County Auxiliary Chairman. It gives all the policies and plans of the National Auxiliary. Let us read the spring and summer numbers very carefully before formulating our year's program.

I think that all our projects this year should have a medical significance. We should gladly coöperate in all war activities, but our first responsibility should be our own medical family. Let us do everything possible for the general welfare and entertainment of the lonely families of doctors in the service and give any assistance that might be needed when they return home.

Before we support local benevolences, let us be sure we have contributed generously to our own: for "if any provide not for his own, and especially for those of his own house, he hath denied the faith, and is worse than an infidel." We should give to our Memorial Fund which assists doctors' needy widows and orphans, and to our two Loan Funds which assist worthy medical students, and to our Library Fund which enlarges our State Medical Library.

Also, we must not become so absorbed with local health problems that we fail to carry out our own Health Education Program, as presented by our Chairmen of Program, Physical Examinations, Public Relations, and Legislation. This program is definite enough to be of service to our doctors, yet flexible enough to meet the needs of each County Auxiliary. Where the Health Essay contest does not meet the need of the schools, Health Posters, Health Films, electrically transcribed radio programs, or talks on health subjects might be used.

Our National Auxiliary has suggested that the State Auxiliary incorporate into its Health Education Program the very essential project of the Prevention of Juvenile Delinquency. This is a medical problem in that it includes particularly venereal disease and pregnancy, which must be prevented or treated. Rehabilitating the homes of delinquent children, lecturers to parent groups, coöperating with church youth programs, assisting juvenile court officers, providing wholesome play and community recreation are a few suggested possible ways of doing this.

There are a few projects that have become traditions in our Auxiliary, and we cannot emphasize them too much: Physical Examinations, Public Relations Day, Doctors' Day, and the A. M. A. Radio Broadcasts.

As managing one's own health is the first step in furthering the cause of Health Education, we will continue to emphasize periodic medical examinations in our own families, beginning with the head of the family, the doctor. Seeing that the doctor keeps well is the best service we can render his family and his community. Each wife must be a committee of one to see that the doctor keeps fit.

Of course our Public Relations Committee is busy all the year informing the public in every possible way of the ideals of American Medicine, its aims and achievements; but one day is given exclusively to this committee to emphasize its importance. The Public Relations Day Program is one of health guidance, designed to reach as many people in the community as possible. It is well to have the coöperation of the doctors, dentists, nurses, school board, and other community leaders. It might take the form of an all-day health institute, a forum on health topics, a playlet on medical discoveries or war heroes, or just an open health meeting with speakers from the County Medical Society.

Another annual Auxiliary custom, that is rapidly becoming nation wide, is Doctors' Day. It is designed to honor our physicians, and any program that provides rest from the strain of practice is appropriate at this time. It might be one to enhance the doctor's appreciation of literature or music, or one to encourage the establishment of hobbies. Every doctor needs a day each week for recreation, in addition to the Biblical seventh day for rest and worship. Here again, the Auxiliary can only suggest, it is the doctor's wife who must try to enforce such a schedule.

Just now the most important task of our Auxiliary continues to be its fight against legislation favorable to chiropractors and government medicine, legislation that will destroy the high standards of medicine and lower the quality of medical care in our state and nation. Our Auxiliary will gladly assume its share of the responsibility of safeguarding the public health, and will follow the directions of the Advisory Committee of the State Medical Association in doing everything in its power to defend and protect the profession it holds so dear.

I am grateful to this Auxiliary for the confidence it has placed in me in making me its president. It is a source of personal satisfaction to be of service to the noblest profession on earth. I am looking forward to a happy and successful year because of the earnest thought and wise planning of this Executive Board and because of the active and alert County Auxiliaries which make our State Auxiliary. May our efforts be like the seed that "fell into good ground, and brought forth fruit, some an hundredfold."

There being no further business the meeting adjourned, *sine die.*

MRS. MARK H. LATIMER, Recording Secretary.

POST EXECUTIVE BOARD MEETING

With the President, Mrs. Charles B. Alexander, of San Antonio, as hostess, forty-three members of the Board and guests enjoyed a most delightful breakfast at the Manor Tea Room, on the morning of May 17, 1945, at 9:30 o'clock.

The business meeting opened with the president presiding.

The invocation was given by Mrs. Ralph Jackson, of San Antonio.

The president introduced the president-elect, Mrs. George Turner, of El Paso, who responded briefly. Officers for the new year were announced and those present were introduced.

Chairmen and members of standing committees were announced as follows:

CHAIRMEN OF STANDING COMMITTEES

Legislation—Mrs. A. B. Pumphrey, Fort Worth.
Public Relations—Mrs. W. R. Snow, Abilene.
Library—Mrs. Frank Haggard, San Antonio, Chairman; Mrs. Sam Thompson, Kerrville; Mrs. R. T. Wilson, Austin; Mrs. W. F. Armstrong, Fort Worth.
Historian—Mrs. H. Leslie Moore, Dallas.
Student Loan Fund—Mrs. M. L. Graves, Chairman, Houston; Mrs. Willard Cooke, Galveston; Mrs. John T. Moore, Houston.
George Plunkett Red Scholarship Fund—Mrs. W. E. Ramsey, Houston.
Memorial Fund—Mrs. O. M. Marchman, Dallas, Chairman; Mrs. J. B. Foster, Houston; Mrs. S. F. Harrington, Dallas.
Resolutions—Mrs. C. C. Jones, Comfort, Chairman; Mrs. W. S. Red, Jr., Houston.
Revisions—Mrs. R. B. Homan, El Paso, Chairman; Mrs. J. Frank Clark, Georgetown; Mrs. Ramsay Moore, Dallas.
Reference—Mrs. S. H. Watson, Waxahachie, Chairman; Mrs. E. W. Coyle, San Antonio.
Archives—Mrs. W. A. Wood, Waco, Chairman; Mrs. S. F. Gilbreath, San Antonio.
Texas Research to S. M. A.—Mrs. E. H. Marek, Yoakum.
Bulletin—Mrs. Cecil O. Patterson, Dallas.
Memorial Service—Mrs. P. R. Denman, Houston, Chairman; Mrs. Marvin Duckworth, Cuero; Mrs. A. J. Streit, Amarillo.
Advisory Committee—Mrs. Scott Applewhite, San Antonio, Chairman; Mrs. Sam Thompson, Kerrville; Mrs. A. B. Pumphrey, Fort Worth; Mrs. P. R. Denman, Houston; Mrs. S. F. Harrington, Dallas; Mrs. W. M. Hibbitts, Texarkana; Mrs. S. H. Watson, Waxahachie.
Special Advisory—Mrs. E. V. De Pew, San Antonio, Chairman; Mrs. F. F. Kirby, Waco; Mrs. W. R. Thompson, Fort Worth; Mrs. R. B. Homan, El Paso; Mrs. John T. Moore, Houston; Mrs. Frank Haggard, San Antonio; Mrs. G. V. Brindley, Temple; Mrs. H. R. Dudgeon, Waco; Mrs. E. H. Cary, Dallas; Mrs. O. M. Marchman, Dallas; Mrs. H. C. Haden, Houston; Mrs. Joe Gilbert, Austin; Mrs. H. B. Trigg, Fort Worth; Mrs. S. M. Collom, Texarkana; Mrs. W. A. Wood, Waco; Mrs. M. L. Graves, Houston.
Budget and Finance—Mrs. W. M. Hibbitts, Texarkana, Chairman; Mrs. Walter Minsch, San Antonio; Mrs. E. C. Ferguson, Beaumont.

Council Women were announced as follows:

COUNCIL WOMEN

District 1—Mrs. Joel Wright, Alpine.
District 2—Mrs. T. D. Young, Roscoe.
District 3—Mrs. Emerson M. Blake, Lubbock.
District 4—Mrs. Joe McFarland, Brownwood.
District 5—Mrs. R. H. Crockett, San Antonio.
District 6—Mrs. Paul H. Frenzel, Donna.
District 7—Mrs. T. J. McElhenney, Austin.
District 8—Mrs. R. M. Milner, Yoakum.
District 9—Mrs. L. L. D. Tuttle, Houston.
District 10—Mrs. R. C. Bellamy, Daisetta.
District 11—Mrs. L. B. Windham, Tyler.
District 12—Mrs. Cleveland H. Brooks, Waco.
District 13—Mrs. E. Roy Townsend, Eastland.
District 14—Mrs. O. W. Robinson, Paris.
District 15—Mrs. R. C. Cross, Texarkana.

County presidents present were introduced.

The President then presented members of her hostess committee for the breakfast, who were past-presidents of the Bexar County Auxiliary.

The Program Chairman, Mrs. Mark Latimer, presented plans for the year's work. Upon motion of Mrs. S. C. Applewhite, it was decided to accept the plans of the Program Chairman, that, instead of the Annual Essay Contest, an award be made based on the outstanding monthly article in *Hygeia*. It was further announced that details of the plan would be mailed to County Presidents and Council Women.

The Reference Committee Chairman, Mrs. S. H. Watson, referred to a letter received from Mrs. W. E. Ramsay, Chairman of the George P. Red Fund, in which a letter from the Board was requested giving the bank, in Houston, where the trust fund is held, permission to buy Bonds for the Fund until such time as the fund is needed for Scholarships for medical students. Mrs. Watson asked Mrs. P. R. Denman to read from the Constitution the authority given the Scholarship Fund Committee. The information requested was read to the Board, and the Secretary was instructed to write the Bank, that the money be invested as directed by the George P. Red Fund Committee.

The President announced that the third member of the George P. Red Committee is elected each year, and that nominations were in order. Mrs. Jack Watts, nominated by Mrs. Paul H. Frenzel, was elected unanimously.

In the absence of the Chairman of the Budget Committee, Mrs. Wm. Hibbitts, Mrs. Walter Minsch, committee member, presented the following budget for the year:

President	$400.00
First Vice-President	15.00
Recording Secretary	10.00
Typing Membership Lists	5.00
Fourth Vice-President	10.00
Auditing	35.00
Stationery	65.00
Essay Awards	35.00
Treasurer	10.00
Total	$585.00

The budget was adopted upon motion of Mrs. P. R. Denman.

The President announced that we are entitled to one delegate for each one hundred paid-up memberships and that, according to our membership, we are allowed twenty-three delegates to the meeting of the Auxiliary to the American Medical Association. Mrs. Sam Thompson moved that the President be given the authority to appoint the delegates from the State Auxiliary if and when the American Association Convention is held this year. The motion carried.

Asked by the President, the Parliamentarian, Mrs. W. R. Klingensmith, read from the Constitution that the Nominating Committee is elected by this body, three members of the Board and four from the general body. The following were duly elected: Mrs. Sam Thompson, Kerrville, Chairman; Mrs. Frank Haggard, San Antonio; Mrs. W. F. Armstrong. Fort Worth; Mrs. R. C. Cross, Texarkana; Mrs. John T. Moore, Houston; Mrs. C. M. Cash, San Benito; Mrs. C. O. Patterson, Dallas.

After a brief discussion of the need of acquainting the State Medical Association of the interests and work of the Auxiliary, it was voted, upon motion of Mrs. Frank Haggard, that resolutions be drawn up by the co-chairman of the Resolutions Committee, Mrs. W. S. Red, Jr., who was present, and sent to the President of the State Medical Association and the Chairman of the Board of Trustees, requesting that the Auxiliary President and Legislative Chairman be permitted to speak before the House of Delegates of the State Medical Association.

The President announced that members would be notified later of the time and place of the Fall Board meeting.

There being no further business, the meeting adjourned, *sine die*.—MRS. WILBER ROBERTSON, Secretary Pro-tem, San Antonio.

MEMBERSHIP

Woman's Auxiliary to the State Medical Association of Texas

MAY, 1945

The membership list which follows is compiled from names sent to the State Treasurer, by county auxiliaries, as this year's paid-up members.

The Councilor Districts of the Auxiliary are the same as those of the State Medical Association. By referring to page 112 of this number of the JOURNAL which carries the list of Councilor Districts of the Association and the counties they contain, it may be ascertained in which Councilor District any particular county belongs.

FIRST OR EL PASO DISTRICT

Mrs. Joel Wright
Alpine
Council Woman

EL PASO COUNTY AUXILIARY†

Armistead, Mrs. S. D., 4301 Trowbridge.
*Awe, Mrs. Chester D., 3422 Ocean Front, San Diego, Calif.
*Basom, Mrs. W. C., 3612½ Pershing Drive.
Barrett, Mrs. F. O., 2733 Gold.
Bennett, Mrs. J. Travis, 2611 Altura Blvd.
*Black, Mrs. A. P., 2735 Federal.
*Breck, Mrs. Louis W., Box 423, Bastrop.
*Britton, Mrs. Bloyce, 1108 West 8th Street, Santa Ana, Calif.
Britton, Mrs. W. W., 2409 Montana.
Brown, Mrs. C. P., 2900 Federal.
Brunner, Mrs. George, 908 Winter.
Butler, Mrs. A. H., 3207 Memphis.
Carter, Mrs. Joe C., 1512 Elm.
*Causey, Mrs. E. G., 1009 Park Road.
Cummins, Mrs. E. J., 4011 Pershing Drive.
*Curtis, Mrs. W. R., 2534 Harris Blvd., Austin.
Davis, Mrs. W. J., 1114 N Copia.
Deady, Mrs. H. P., Montoya Lane.
Duncan, Mrs. E. A., 2018 N. Kansas.
Dunne, Mrs. G. M., Sierra Blanca.
Eck, Mrs. A. J., First Natl. Bank Bldg.
Egbert, Mrs. Orville, 3000 Federal.
*Epstein, Mrs. I. M., 4001 Cumberland.
*Evans, Mrs. F. G., 1123 N. Oregon.
Gaddis, Mrs. R. L., 1015 Galloway Avenue.
Gaddy, Mrs. S. J., 912 N. Mesa.
*Gallagher, Mrs. Paul, 3628 Shenandoah, Dallas 5.
*Goodloe, Mrs. B. L., 3200 Memphis.
*Goodwin, Mrs. F. C., 925 Rim Road.
Gorman, Mrs. J. J., 3100 Federal.
*Green, Mrs. J. L., 3012 Silver.
Hardy, Mrs. J. A., 800 Prospect.
*Hart, Mrs. M. S., 1962 E. 71t Place, Chicago, Ill.
*Hatfield, Mrs. H. D., 725 Hickman Road, Augusta, Ga.
Hendricks, Mrs. C. M., 3601 McKinley.
Holt, Mrs. Russell, 2735 Wheeling.
*Homan, Mrs. Ralph, 272 Peralta, San Leandro, Calif.
Homan, Mrs. Robert B. Sr., 1837 Grandview.
Homan, Mrs. Robert B. Jr., 3117 Copper.
*Hughes, Mrs. R. P., La Union, N. M.
Irvin, Mrs. E. H., 321 W. Rio Grande.
Jamieson, Mrs. W. R., 1205 Robinson Blvd.
*Jordan, Mrs. J. H., 4515 Cumberland.
Jumper, Mrs. C. E., 1511 N. Virginia.
Keller, Mrs. N. H., 700 Cincinnati.
King, Mrs. Sam, 3325 Pershing.
Laws, Mrs. J. W., 701 N. St. Vrain.
Leigh, Mrs. Harry, 2619 Altura Blvd.
Liddell, Mrs. T. C., 2731 Richmond.
Long, Mrs. A. D., 1805 Elm.
Lynch, Mrs. K. D., 235 Pennsylvania.
Martin, Mrs. J. D., 3003 Louisville.
Marshall, Mrs. A. G., 3919 Chester.
Mason, Mrs. C. H., 4430 Oxford.
McCamant, Mrs. T. J., 4500 Trowbridge.
McChesney, Mrs. Paul, 401 E. Robinson Blvd.
McClain, Mrs. J. N., Fabens, Tex.
McNeil, Mrs. Irving, 1917 N. Mesa.
Miller, Mrs. Felix P., 5 Cumberland Circle.
Molloy, Mrs. M. S., 502 Cincinnati.
Morrison, Mrs. John E., 800 College.
*Multauf, Mrs. A. W., 935 Rim Road.
Murphy, Mrs. John L., 2942 Copper.
Pangman, Mrs. John W., 1216 Winter Rd.
Peticolas, Mrs. John D., 3705 Chester.
Prothro, Mrs. W. B., 1128 N. Cotton.
*Rawlings, Mrs. J. Mott, 241 W. Woodland, Ferndale, Mich.
Rennick, Mrs. Samuel, Hotel Cortez.
Rheinheimer, Mrs. E. W., 3124 Aurora.
Rigney, Mrs. Paul W., 2718 Wheeling.
Rogde, Mrs. Jacob, Clark Road, Box 98.
Rogers, Mrs. E. B., 1601 Rio Grande, East.
Rogers, Mrs. H. Earl, 2518 Richmond.
Rogers, Mrs. S. Perry, 1140 Galloway.
Rogers, Mrs. W. P., 901 Montana.
Schuster, Mrs. F. P., 939 Rim Road.
Schuster, Mrs. S. A., 1000 N. Mesa.
Shannon, Mrs. Hugh, 1307 Cincinnati.
Smith, Mrs. Leslie, 2837 Lebanon.
*Snidow, Mrs. F. A., 917 King's Road, Leesville, La.
Spearman, Mrs. M. P., 1124 Baltimore.
Spier, Mrs. Erich, 911 McKelligon.
Stevens, Mrs. B. F., 217 Balcker.
*Stevenson, Mrs. W. H., 503 Cliff.
Stowe, Mrs. Jesson L., 1104 Cincinnati.
Swope, Mrs. S. D., 1127 Montana.
Terrell, Mrs. Scurry L., 2600 Richmond.
Thompson, Mrs. Robert F., 1227 Rim Road.
Treece, Mrs. A. A., Fabens, Tex.
Turner, Mrs. George, 3009 Silver.
Vance, Mrs. James, 1717 N. Mesa.
Vandevere, Mrs. W. E., 1919 N. Stanton.
Varner, Mrs. H. H., 3030 Wheeling.
*Villareal, Mrs. Leopoldo, 1330 Madeline.
Von Almen, Mrs. S. G., 605 Robinson Blvd.
Webb, Mrs. C. E., 1211 N. Mesa.
Wilcox, Mrs. L. E., 4779 Cumberland.
Worsham, Mrs. B. M., 1325 Montana.

DECEASED MEMBERS—1944-45

Jenness, Mrs. B. F., 3418 Fort Blvd.
Gray, Mrs. J. B., 813 West Yandell.

*Members on leave.
†Address is El Paso unless otherwise stated.

SECOND OR BIG SPRING DISTRICT

Mrs. T. D. Young
Roscoe
Council Woman

ECTOR-MIDLAND-MARTIN-HOWARD-ANDREWS-GLASSCOCK COUNTIES AUXILIARY

Bennett, Mrs. M. H., Big Spring.
Braganier, Mrs. J. H., Odessa.
Bobo, Mrs. Thos. C., Midland.
Chapple, Mrs. J. H., Midland.
Cooper, Mrs. Leora, Midland.
Cowper, Mrs. R. B. G., Big Spring.
Dickerson, Mrs. Melford, Midland.
Golladay, Mrs. Robert M., Midland.
Hall, Mrs. G. T., Big Spring.
Headlee, Mrs. E. V., Odessa.
Hogan, Mrs. J. E., Big Spring.
Leggett, Mrs. L. Waldo, Midland.
Lekisch, Mrs. Kurt, Midland.
Malone, Mrs. P. W., Big Spring.
Ray, Mrs. C. Thorpe, Odessa.
Sanders, Mrs. Preston, Big Spring.
Wood, Mrs. G. H., Big Spring.
Woodall, Mrs. J. M., Big Spring.
Whithouse, Mrs. W. G., Big Spring.

DAWSON-LYNN-TERRY-GAINES-YOAKUM COUNTIES AUXILIARY

Bradford, Mrs. Andrew L., Seagraves.
*Daniell, Mrs. A. H., Brownfield.
Davis, Mrs. E. C., Brownfield.
Dunn, Mrs. W. H., Lamesa.
Frazier, Mrs. S. Z., Lamesa.
Price, Mrs. N. H., Lamesa.
Prohl, Mrs. Emil, Tahoka.
Richards, Mrs. L. D., Seminole.
Smith, Mrs. A. H., Lamesa.
Tomb, Mrs. Andrew S., Seminole.
Treadaway, Mrs. T. J., Jr., Brownfield.
Treadaway, Mrs. T. L., Sr., Brownfield.

MEMBERS AT LARGE

Young, Mrs. T. D., Roscoe.
Young, Mrs. J. W., Roscoe.

THIRD OR PANHANDLE DISTRICT

Mrs. E. M. Blake
Lubbock
Council Woman

CHILDRESS-COLLINGSWORTH-HALL COUNTIES AUXILIARY

Clark, Mrs. R. E., Memphis.
Goodall, Mrs. O. R., Memphis.
Jernigan, Mrs. J. H., Childress.
Jeter, Mrs. P. E., Childress.
Jones, Mrs. C. B., Wellington.
Jones, Mrs. E. W., Wellington.
Moss, Mrs. E. W., San Juan.
Odom, Mrs. J. A., Memphis.
Townsend, Mrs. S. E., Childress.
Wilson, Mrs. Henry, Memphis.
Wilson, Mrs. W., Memphis.

LUBBOCK-CROSBY COUNTIES AUXILIARY[1]

Barsh, Mrs. A. G., 2511 22nd St.
Blake, Mrs. Emerson M., 3311 20th St.
*Clark, Mrs. Doyce McIntire, 2617 19th St.
Clark, Mrs. Vester Varden, 2617 19th St.
Cross, Mrs. Denzil D., 3001 20th St.
Doss, Mrs. Doyle J., 1502 Arnett St.
Dunn, Mrs. Saml. G., Levelland Road.
English, Mrs. Otis W., 2809 19th St.
Ewing, Mrs. Mahon M., 2504 23rd St.
Fiel, Mrs. Chas A., Jr., 3801 19th St.
Hand, Mrs. O. Robt., 3021 22nd St.
Harris, Mrs. Joseph R., Jr., 2109 18th St.
Hunt, Mrs. Ewell L., 2423 22nd St.
Hutchinson, Mrs. James T., 1519 Broadway.
Jenkins, Mrs. B. Arthur, 2124 30th St.
Key, Mrs. Olan, 2303 18th St.
Krueger, Mrs. Julius T., 2703 19th St.
Lattimore, Mrs. J. P., Tahoka Highway.
Malone, Mrs. Frank B., 2435 21st St.
*Mast, Mrs. Henri, 1919 28th St.
Maxwell, Mrs. H. C., 2417 Broadway.
McCarty, Mrs. Robt. H., 1915 28th St.
Overton, Mrs. Marvin C., 2523 21st St.
Rollo, Mrs. James W., 1802 Ave. S.
Standefer, Mrs. Fred W., 3105 21st St.
Stewart, Mrs. Allen T., 3120 21st St.
Stiles, Mrs. James H., 3002 22nd St.
Taylor, Mrs. Otis, Jr., 2706 24th St.
Wagner, Mrs. C. J., 1644 Broadway.

POTTER COUNTY AUXILIARY[2]

Churchill, Mrs. T. P., 1309 Bellaire.
Gist, Mrs. R. O., 2615 Hayden.
Hendricks, Mrs. J. W., 3009 Hughes.
Keys, Mrs. R., 2201 Hughes.
Klingensmith, Mrs. W. R., 2415 Lipscomb.
Marsalis, Mrs. O. S., 1502 Bowie.
McMeans, Mrs.
Owens, Mrs. G., 109 Sunset.
Rowley, Mrs. E. A., 1004 Crockett.
Royse, Mrs. G. T., 321 Sunset.
Streit, Mrs. A. J., 2413 Hayden.
Waddill, Mrs. G. M., 1206 Western.
White, Mrs. J. B., 2035 Org.

MEMBERS AT LARGE

DALLAM-HARTLEY-SHERMAN-MOORE COUNTIES

Reid, Mrs. Fran I., Dumas.

DONLEY-ARMSTRONG COUNTIES

Strickland, Mrs. Calvin G., Clarendon.

GRAY-WHEELER COUNTIES

Brown, Mrs. Richard M., Pampa.

[1]Address is Lubbock unless otherwise stated.
*Members on leave.
[2]Address is Amarillo unless otherwise stated.

Christian, Mrs. Paul C., Pampa.
Gooch, Mrs. James W., Shamrock.
Nicholson, Mrs. Harold E., Wheeler.
Walker, Mrs. Glenn R., Wheeler.

HALE-FLOYD-BRISCOE-SWISHER COUNTIES

Bundy, Mrs. Orville T., Silverton.
Crawford, Mrs. J. Ed., Tulia.
Smith, Mrs. Geo. W., Floydada.

HARDEMAN-COTTLE-FOARD-MOTLEY COUNTIES

Pate, Mrs. Clarence C., Paducah.
Stanley, Mrs. James S., Matador.
Vestal, Mrs. Earl A., Quanah.

HUTCHINSON-CARSON COUNTIES

Barksdale, Mrs. Wm. C., Borger.
Gibner, Mrs. George P., Spearman.
Hamra, Mrs. Henry M., Borger.
Stephens, Mrs. W. G., Borger.
Brooks, Mrs. William, Phillips.

LAMB-BAILEY-HOCKLEY-COCHRAN COUNTIES

Dow, Mrs. Harold D., Levelland.

LUBBOCK-CROSBY COUNTIES

Payne, Mrs. Wm. E., Slaton.
Surman, Mrs. Arnold C., Post.

RANDALL-DEAF SMITH-PARMER-CASTRO-OLDHAM COUNTIES

Cogswell, Mrs. Ronald E., Dimmitt.
Jarrett, Mrs. Robert P., Canyon.

FOURTH OR SAN ANGELO DISTRICT

Mrs. Joe McFarland
Brownwood
Council Woman

BROWN-COMANCHE-MILLS-SAN SABA COUNTIES AUXILIARY[1]

Allen, Mrs. H. B., 1710 Vincent.
Allen, Mrs. W. L., 1018 La Monte.
Burns, Mrs. E. J., Bangs, Tex.
Cadenhead, Mrs. E. F., 2401 Coggin Ave.
Campbell, Mrs. J. M., Goldthwaite, Tex.
Horn, Mrs. J. M., 1905 First St.
Lobstein, Mrs. H. L., 1007 Coggin Ave.
McFarland, Mrs. J. R., 1312 Cottage.
Scott, Mrs. D. R., 2300 Coggin Ave.
Terrell, Mrs. Jim., Stephenville, Tex.

ASSOCIATE MEMBERS

Felts, Mrs. R., San Saba.
Pence, Mrs. W. S., San Saba.
Shelton, Mrs. B. M., Brownwood.

TOM GREEN-EIGHT COUNTY AUXILIARY[2]

Anderson, Mrs. W. D., 2213 Dallas.
Batts, Mrs. Bonnie, 1007 Austin.
Bunyard, Mrs. J. A., 1302 MacKenzie.
Carbrey, Mrs. T. F., Cactus Hotel.
Finks, Mrs. R. M., 1513 Paseo De Vaca.
Hixson, Mrs. W. C., 329 W. Ave. D.
Horney, Mrs. Harlan, St. Angelus Hotel.
Husbands, Mrs. T. L., 1401 Shafter.
Hutchins, Mrs. F. Leon, 2202 Dallas.
Kitchens, Mrs. W. L., 213 W. Harris.
Lewis, Mrs. A. L., 119 E. Beauregard.
Lewis, Mrs. G. L., 1325 S. Madison.
McAnulty, Mrs. J. P., 1005 S. Park.
McIntire, Mrs. F. T., 1505 S. Madison.
McKnight, Mrs. J. B., Sanatorium, Tex.
Mee, Mrs. E. L., 1426 Shafter.
Mitchell, Mrs. W. G., 318 E. 14th.
Nibling, Mrs. G. W. 203 W. Twohig.
Rape, Mrs. J. M., 1521 W. Harris.
Schulkey, Mrs. W. E., 1221 S. Madison.
Schulze, Mrs. V. E., Christoval Road.
Smith, Mrs. J. H., 1300 Paseo De Vaca.
Straus, Mrs. Edw. C., Eden.
Wiig, Mrs. Lawrence, 608 E. Parkway.
Windham, Mrs. R. E., Christoval Road.
Womack, Mrs. C. T., 208 N. Madison.

MEMBERS AT LARGE

Anderson, Mrs. J. S., Brady.
Barron, Mrs. John L., Winters.
Felts, Mrs. Richard C., San Saba.
Griffith, Mrs. J. K., Robert Lee.
Henchman, Mrs. A. Warren, Brady.
Howell, Mrs. J. Franklin, Sonora.
Huff, Mrs. Oscar, Mason.
Jordon, Mrs. D. W., Brady.
Lasatar, Mrs. O. R., Ballinger.
Leggett, Mrs. J. A., Menard.
Macune, Mrs. J. W., Ballinger.
McDonald, Mrs. E. D., Santa Anna.
Nichols, Mrs. J. M., Coleman.
Pence, Mrs. W. S., San Saba.
Ricks, Mr. Glen H., Brady.
Shelton, Mrs. Ben, Brownwood.
Young, Mrs. J. C., Coleman.

FIFTH OR SAN ANTONIO DISTRICT

Mrs. R. H. Crockett
San Antonio
Council Woman

BEXAS COUNTY AUXILIARY†

Adams, Mrs. S., 404 Bushnell Apts.
Alexander, Mrs. C. B., 2003 W Magnolia.
Allen, Mrs. S. W., Plaza Hotel.
*Allin, Mrs. F., 1539 Hicks.
*Allin, Mrs. Willis.
*Altgelt, Mrs. D. D.
Anderson, Mrs. J. S., 166 Elizabeth Road.
Applewhite, Mrs. S. C., 401 East Park Ave.
Arendt, Mrs. E. J., 625 Shook Ave.
Atkinson, Mrs. D. T., Huebner Rd.
*Atmar, Mrs. R. C., Huebner Rd.
*Barbato, Mrs. L.
*Barnett, Mrs. J. L., 223 Laurel Heights Pl.
Bates, Mrs. L. E., 215 Ewald.
Beach, Mrs. Asa, 129 East Summit.
Beck, Mrs. L. K., 1420 McCullough.
Bell, Mrs. J. D. (Assoc.) 148 Thoraine.
Berchelmann, Mrs. A., 901 W. Mistletoe.
Biggar, Mrs. J. H., 242 Rockwood.
*Bloom, Mrs. B.
Boccelato, Mrs. S. L., 923 W. Huisache.
Boehs, Mrs. C. J., 135 W. Hollywood.
*Bondurant, Mrs. W. W., 430 College Blvd.
*Bosshardt, Mrs. C. E.
Bosshardt, Mrs. C. (Assoc.) 227 Claudia.
Bowen, Mrs. P. G., 331 W. Kings Highway.
Bowen, Mrs. R. E., 1849 W. Gramercy Pl.
*Bowen, Mrs. R. E., Jr., 2245 W. Magnolia.
*Boyd, Mrs. G. D.
Brown, Mrs. A. A., 719 Howard.
Burg, Mrs. E., 2167 W. Summit.
Burk, Mrs. W. E., 310 Donaldson.
Bush, Mrs. H. M., 1540 W. Huisache.
*Butler, Mrs. T. B., 244 Belvedere.
Cade, Mrs. W. H., 111 Canterbury.
*Cade, Mrs. C. H., 307 E. Park Ave.
*Calbert, Mrs. H.
Calder, Mrs. R., 223 E. Lullwood.
Cassity, Mrs. J. C., 325 Cloverlead.
Cayo, Mrs. E. A., 303 Broadview Drive W.
Celaya, Mrs. H., 631 Ciruela.
Champion, Mrs. A. W., 135 W. Rosewood.
*Childers, Mrs. M. A., Jr.
Christian, Mrs. T. E., 450 Mary Louise Dr.
Clark, Mrs. A. F., 306 E Craig.
*Clark, Mrs. A. F., Jr.
Cooper, Mrs. E., 119 E. Wildwood Dr.
*Cooper, Mrs. F. B.
*Cooper, Mrs. M. J., 206 Primera Dr.
Copeland, Mrs. J. B., 367 North Drive.
*Cowles, Mrs. A. G, 202 W. Kings Highway.
*Coyle, Mrs. E. W., 213 Grant.
Coyle, Mrs. J. E., 213 Grant.
Crockett, Mrs. R. H., 1828 Sacramento.
Cunningham, Mrs. S. P. (Assoc.), 115 W. Woodlawn.
Cutter, Mrs. I. T., 232 W. Lullwood.
Davis, Mrs. M., 945 W. Huisache.
Davis, Mrs. R., 636 E. Olmos Drive.
Davis, Mrs. Robert, 122 Gerald.
DeLeon, Mrs. J. J., 511 Club Drive.
DePew, Mrs. E. V., 115 E. Agarita.
Dittman, Mrs. C. H., 615 Ciruela.
Donop, Mrs. P., 402 Meredith Drive.
Dorbandt, Mrs. M., 104 E. Norwood.
Dreiss, Mrs. A. M., 319 Mission.
*Dufner, Mrs. Romie.
Dumas, Mrs. E. D., 418 W French Pl.
Engleke, Mrs. A. (Assoc.), 205 Terrell Rd.
*Fargo, Mrs. W. C. (Assoc.), 146 Harrigan.
Fetzer, Mrs. W. J., 137 Seeling Blvd.
*Folbre, Mrs. T. W., 335 Garrity Road.
Forbes, Mrs. M. A., 200 Warwick.
Freeman, Mrs. F. M., Jr. (Assoc.), Las Vegas, N. M.
*French, Mrs. J. A., 316 Maverick.
Geyer, Mrs. G. H., 747 E. Ashby.
Giesecke, Mrs. A. (Assoc.), 203 W. Myrtle.
*Giesecke, Mrs. C., 105 W. Rosewood.
Gilbreath, Mrs. S. F., 1347 W. Fulton.
Giles, Mrs. R. G., 2227 W. Mistletoe.
*Gleckler, Mrs. J. D.
Glober, Mrs. R. A., 343 North Drive.
*Goeth, Mrs. R. A., 125 E. Huisache.
Goode, Mrs. J. W., 134 Hermosa Drive.
Goodson, Mrs. T. N., Gunter Hotel.
Goodwin, Mrs. R. T., 124 Barilla.
*Gossett, Mrs. R. F., 625 Lamont.
Graves, Mrs. A., 222 Geneseo.
Graves, Mrs. W. E., 804 Poplar.
Haggard, Mrs. C. H., 624 Lamont.
Haggard, Mrs. F. N. (Hon.), 615 E. Olmos.
Haile, Mrs. J. T., (Assoc.) 912 W Agarita.
Hairston, Mrs. J. T., 426 Donaldson.
Hamilton, Mrs. W. S., 207 Grand View.
*Hargis, Mrs. H.
Hartman, Mrs. H., 831 W. Lynwood.
*Hartman, Mrs. A. W., Jr., 138 E. Elsmere.
*Heck, Mrs. W. H.
Heinen, Mrs. A. (Assoc.) Seguin, Tex.
*Helfer, Mrs. L. M.
Herff, Mrs. A. F., 363 Terrell Road.
Herff, Mrs. F. P., 615 W. Ashby.
*Hill, Mrs. H., 311 W Lullwood.
Hill, Mrs. L., 131 Brittany Drive.
*Holshouser, Mrs. C. A., 226 Brittany Drive.
Horton, Mrs. G. W., 226 Club Drive.
Hoskins, Mrs. H. R., 310 Pershing Ave.
*Hunt, Mrs. K. M.
Jackson, Mrs. L. B., 203 W. Mulberry.
Jackson, Mrs. R. S., 201 Mary Louise Dr.
*Jensen, Mrs. A. M.
Jensen, Mrs. M. H., 1616 W. Huisache.
Johnson, Mrs. H. M., Jr., 130 W. Norwood.
*Johnson, Mrs. W. J., 423 Donaldson.
Judkins, Mrs. O. H., 240 W. Summit.
Kahn, Mrs. I. S., 128 Harrison.
Kaliski, Mrs. Belle, 339 E. Craig.
Keating, Mrs. P. M., 222 King William.
Kenney, Mrs. N. M., 222 E. Poplar.
*King, Mrs. A. C., 912 W. Agarita.
King, Mrs. W. A., 912 W. Agarita.
Kliefoth, Mrs. F. H., 316 Cloverleaf.
Kopecky, Mrs. J., 627 Lamont.
Kopecky, Mrs. L., 526 College.
*Kupper, Mrs. R. C.
Ladd, Mrs. G. B., 719 Fulton Crt.
Leap, Mrs. H. L., 241 King William.
Lee, Mrs. L. L., 270 E. Oakview.
*Lehman, Mrs. C. F., 336 Terrell Road.
Letteer, Mrs. C. R. (Assoc.) 303 Natalen.
*Letteer, Mrs. R.
Leopold, Mrs. H. N., 200 Torcido.
*Livingston, Mrs. C. S.
Lochte, Mrs. E. R., 2001 W. Summit.
*Luedemann, Mrs. W. S.
*Lyon, Mrs. E. F.
Manhoff, Miss Sara (Assoc.) 818 W. Woodlawn.
*Magrish, Mrs. P.
*Martin, Mrs. O. O. (Assoc.), 1136 Hammond.
Mason, Mrs. O. (Assoc.), 254 Castano.
*Matthews, Mrs. J. L., Randolph Field.
*Maxwell, Mrs. E. A., 119 W. Rosewood.
Maxwell, Mrs. W. W., 932 W. Woodlawn.
McCamish, Mrs. E. W., 120 E. Magnolia.
McCurdy, Mrs. W. M., 602 Mandalay Dr. E.
McGehee, Mrs. C., 236 Quenten Drive.
McGehee, Mrs. J. S. (Assoc.), 130 W. Norwood.
McIntosh, Mrs. J. A., 208 W. Woodlawn.
*McPeak, Mrs. E. M., 254 Cloverleaf.
Merrick, Mrs. E. H., 2150 W. Magnolia.
Milburn, Mrs. C. L., 331 W. Magnolia.
Milburn, Mrs. K. A., 347 Charles Road.
Mileau, Mrs. A., 514 Pershing Ave.
Miller, Mrs. J. B., 1811 E. Commerce.
Miller, Mrs. J. B., Jr., 117 Brittany.
Minsch, Mrs. W. A. (Transfer), 308 Park Hill Dr.
Minter, Mrs. M. M., St. Anthony Hotel.
Moore, Mrs. J. M., 535 Donaldson.
*Moore, Mrs. S. F.
Moore, Mrs. T. E. (Assoc.), 110 E. Craig.
Mueller, Mrs. E., 154 Barilla.
Muldoon, Mrs. W. E., 308 Park Drive.
Nesbit, Mrs. W. E., 221 W. Mistletoe.
Newhouse, Mrs. O. A. (Assoc.), 325 Magnolia.
Nicholson, Mrs. J. R., 5609 N. New Braunfels.
Nixon, Mrs. J. W., 129 E. Gramercy.
Nixon, Mrs. P. I., 202 E. Courtland.
*Nisbit, Mrs. A. A.
Nunn, Mrs. J. A.
Ogilvie, Mrs. H. H., 137 E. Elsmere.
Oldham, Mrs. J. P., 612 Goliad.
*Oxford, Mrs. Bradfield.
Oxford, Mrs. J. W., Floresville, Tex.
Parsons, Mrs. J. C., 131 W. Ridgewood.
Partain, Mrs. R. A., 201 Morningside.
Paschal, Mrs. F. L., 411 Maverick St.

[1]Address is Brownwood unless otherwise stated.
[2]Address is San Angelo unless otherwise stated.

†Address is San Antonio unless otherwise stated.
*Members on leave.

Paschal, Mrs. C., 403 Maverick St.
Passmore, Mrs. B. H., 416 Maverick St.
*Passmore, Mrs. G. B.
Pinson, Mrs. C. C., 910 Cambridge Oval.
Pipkin, Mrs. J. L., 511 Brackenridge.
Pomerantz, Mrs. A. (Assoc.) 268 E. Lullwood.
*Pomerantz, Mrs. R. B.
Poth, Mrs. D. O., 304 Charles Road.
Potthast, Mrs. O. J., 419 King William.
Pressly, Mrs. T. A., 408 Mary Louise Dr.
Pridgen, Mrs. J. L., 619 W. Mistletoe.
*Pyterek, Mrs. A. B.
Rabel, Mrs. J. E., 130 Lamont.
Ramsdell, Mrs. M. A., 412 Harrison.
Reilly, Mrs. W. A., 365 Club Drive.
*Reinarz, Mrs. B. H.
Reveley, Mrs. H., 121 Nueva.
Reveley, Mrs. James, 727 Chicago.
Rhea, Mrs. R. L. (Assoc.), 304 E. Courtland.
*Rhea, Mrs. Robert, Jr., 239 Allensworth.
*Rice, Mrs. Lee, 343 W. Gramercy.
*Ritch, Mrs. Allen.
Roan, Mrs. O., 107 Geneseo.
Roberts, Mrs. R. A., 1553 W. Huisache.
Robertson, Mrs. W., 540 Lamont.
Rosebrough, Mrs. F. H., 1040 W. Woodlawn.
Rosenzweig, Mrs. M. M., 104 Ridgewood.
Ross, Mrs. Lloyd I., 122 Canterbury.
Ross, Mrs. R. R., 614 E. Olmos.
*Russ, Mrs. S. E.
Russ, Mrs. W. B., 1301 Belknap.
Russell, Mrs. D. A., 600 Patterson.
*Saegert, Mrs. A. H.
Sample, Mrs. R. O., 207 Park Lane.
Schattengerg, Mrs. H. J., 210 Eleanor.
*Schwartzberg, Mrs. H. J.
*Scott, Mrs. R. E., 315 Cloverleaf.
*Scott, Mrs. R. J., 1212 Maverick.
Scull, Mrs. C. E., 115 Paseo Encinal.
Severance, Mrs. A. O., 151 Harrison.
Sharp, Mrs. T. H., 126 Park Hill Drive.
Shaver, Mrs. P. J. (Assoc.), 141 Club Dr.
Shepherd, Mrs. W. F., 1401 Highland Blvd.
Shipman, Mrs. E. D., 551 Cincinnati.
Skinner, Mrs. I. D., 418 W. Russell Place.
Sorell, Mrs. Frank W., 301 Luther Drive.
*Stansel, Mrs. Paul
Steed, Mrs. Frank, 433 Mary Louise Drive.
Steole, Mrs. J. S. (Assoc.), 126 W. Woodlawn.
*Steinberg, Mrs. F. W., 237 Castano.
Stieler, Mrs. Albert, 315 Club Drive.
Stout, Mrs. B. F., 110 W Lynwood.
Stuck, Mrs. W. G., 312 Cardinal.
Sturm, Mrs. C. E., State Hospital.
Sugg, Mrs. W. R., 218 Morningside Dr.
Sweet, Mrs. Horace, 233 W. Summit.
*Swinny, Mrs. Boen.
Sykes, Mrs. E. M., 201 Charles Road.
Taylor, Mrs. C. W., 276 Mandalay Drive.
Tennison, Mrs. C. W., 221 Primrose.
*Thomas, Mrs. R. P.
Timmins, Mrs. O. H., 928 W. Agarita.
*Todd, Mrs. D. A., 305 Thelma Drive.
Turnbull, Mrs. E. (Assoc.), 530 Geneseo.
Venable, Mrs. C. S., 154 Park Hill Dr.
Venable, Mrs. J. M., 139 Park Hill Dr.
Walker, Mrs. C. J., River Road.
Walsh, Mrs. F. C., Hunt, Tex.
Watts, Mrs. J. A., 433 W. Woodlawn.
Weatherford, Mrs. E. W., 271 E. Lullwood.
Weatherford, Mrs. F. W. (Assoc.), 410 W. Lynwood.
Weinfield, Mrs. L. M., 114 Natalen.
*Weiss, Mrs. V. J.
Wessels, Mrs. A., 130 Oakmont Crt.
West, Mrs. A. Jr. (Assoc.), Vance Jackson Rd.
Whitacre, Mrs. Stan, 228 Alamosa.
Williams, Mrs. V. H., 112 Cloverleaf.
*Winters, Mrs. J. W., 423 Dickman, Ft. Sam Houston.
Wolf, Mrs. W. M., 415 W. Ashby.
Worsham, Mrs. J. W.
Wright, Mrs. R. (Assoc.), New Braunfels.
Wyatt, Mrs. B. W.
Wyneken, Mrs. H. O., 1105 W. French Place.

KERR-KENDALL-GILLESPIE-BANDERA COUNTIES AUXILIARY†

Allison, Mrs. A. P., 1500 Jefferson.
Black, Mrs. A. J.
Cassidy, Mrs. W. A., Legion.
Culver, Mrs. C. M.
Doningues, Mrs. P. J.
Feller, Mrs. L. A., Fredericksburg.
Gaines, Mrs. J. E., Legion.
Gallatin, Mrs. H. H.
Green, Mrs. Mara.
Gregg, Mrs. W. E.
Hoggett, Mrs. Pierce.
Jackson, Mrs. J. D.
Jones, Mrs. C. C., Comfort.
Keidel, Mrs. Victor, Fredericksburg.
Keyser, Mrs. L. L., Fredericksburg.
Knapp, Mrs. D. R.
Koerth, Mrs. C. J.
McClellan, Mrs. C. L.
*Meador, Mrs. C. B.
Perry, Mrs. J. H., Fredericksburg.
*Phillips, Mrs. C. M.
Reid, Mrs. H. P., Legion.
Secor, Mrs. W. L., Hunt.
Spier, Mrs. C. H., Legion.
Swayze, Mrs. H. Y.
Thompson, Mrs. S. E.

†Address is Kerrville unless otherwise stated.
*Members on leave.

SIXTH OR CORPUS CHRISTI DISTRICT

Mrs. P. H. Frenzel
Donna
Council Woman

HIDALGO-STARR COUNTIES AUXILIARY

Frenzel, Mrs. P. H., Donna.
Glass, Mrs. T. W., Weslaco.
Hamme, Mrs. C. J., Edinburg.
Hamme, Mrs. R. E., Edinburg.
Hatfield, Mrs. W. H., McAllen.
Ice, Mrs. Noel, McAllen.
Lawler, Mrs. M. R., Mercedes.
Mann, Mrs. H. W., McAllen.
May, Mrs. J. W., Edinburg.
Moore, Mrs. L. H., Edinburg.
Osborn, Mrs. A. S., McAllen.
Pence, Mrs. R. W., San Juan.
*Reed, Mrs. Earl, San Juan.
Smith, Mrs. E. G., Mercedes.
*Southwick, Mrs. L. M., Edinburg.
Webb, Mrs. J. G., Mercedes.
*Westphal, Mrs. H. M., Weslaco.
Whigham, Mrs. H. E., McAllen.
Whigham, Mrs. W. E., McAllen.

NUECES COUNTY AUXILIARY†

Averbach, Mrs. B. F., 327 Louisiana.
Barnard, Mrs. W. C., 3209 Up River Road.
Bickley, Mrs. E. T., 211 Indiana.
Blair, Mrs. J. V., 3709 Up River Road.
Briggs, Mrs. H. A., 421 Atlantic.
Carter, Mrs. N. D., 425 Del Mar.
Collins, Mrs. C. B., 338 Louise Drive.
*Colyer, Mrs. G. E.
Cope, Mrs. S. F., 617 Naples.
Crain, Mrs. C. F., 714 Craig.
Danford, Mrs. E. A., 230 Indiana.
*Eckhardt, Mrs. K.
Edgerton, Mrs. G. W., 2005 Lawnview.
Edwards, Mrs. T. W., 329 Southern.
Ellis, Mrs. F. A., 339 Cole Street.
Furman, Mrs. M., 310 Atlantic.
Garcia, Mrs. J. A., 313 Robstown Road.
Garrett, Mrs. L. M., 2850 Topeka.
Gibson, Mrs. N. T., Robstown, Tex.
Giles, Mrs. J., 820 Furman.
*Gill, Mrs. K.
*Grossman, Mrs. D.
Grossman, Mrs. S., 155 Rossiter.
Guttman, Mrs. L. P., 3418 Ocean Drive.
Heaney, Mrs. G. H.
Hyder, Mrs. P. L., 145 Southern.
Janssen, Mrs. L. W. O., 614 Furman.
Jasperson, Mrs. C. P., 3201 Up River Road.
*Koepsel, Mrs. O. S.
Landesman, Mrs. J. D., 1200 Tenth St.
Marler, Mrs. O. E., 237 Norton.
Martin, Mrs. S. B., 128 Del Mar.
Mathis, Mrs. E. G., 1116 Second St.
Meador, Mrs. C. N., 337 Naples.
Moller, Mrs. G. T., 335 Laurel.
*Moody, Mrs. F.
Morgan, Mrs. C. G., 156 Santa Barbara.
Nast, Mrs. J., 807 Craig.
Padilla, Mrs. A., 1503 Peabody.
Pilcher, Mrs. J. F., 323 Louise Drive.
Rosenheim, Mrs. P., 130 W. Vanderbilt Dr.
St. John, Mrs. R. V., 225 Indiana.
*Sharp, Mrs. J.
Sigler, Mrs. R., 322 Primrose Drive.
Smith, Mrs. Y. C., 353 Katherine Drive.
Stewart, Mrs. C. D., 114 E. Vanderbilt Dr.
*Swearingen, Mrs. R.
Tally, Mrs. O. H., 1605 Stillman.
*Triplett, Mrs. W.
Williamson, Mrs. C. M., 703 Southern.

†Address is Corpus Christi unless otherwise stated.

CAMERON-WILLACY COUNTIES AUXILIARY[1]

Allen, Mrs. G. Earl, 1415 S. 1st.
Ashcraft, Mrs. E. J., 409 E. Harrison.
Bleakney, Mrs. Phil A., 219 E. Arroyo Dr.
Caldeira, Mrs. Frederik D., 120 E. Arroyo Drive.
Casey, Mrs. J. D., 104 N. Shore Dr., San Benito.
Cash, Mrs. C. M., Rio Hondo Rd., San Benito.
Dawson, Mrs. C. D., 898 N. Sam Houston, San Benito.
Davidson, Mrs. N. A., 1202 E. Jackson.
Deaton, Mrs. Grady, Recently moved to Harris County.
Galleher, Mrs. Geo., 802 W. Lincoln.
Harrop, Mrs. L. L., 165½ W. Hidalgo, Raymondville.
Hockaday, Mrs. J. A., 1120 Garcia, Port Isabel.
Letzerich, Mrs. A. M., 212 E. Polk.
Morris, Mrs. E. T., 260 Poinciana, San Benito.
Pollard, Mrs. A. J., 1001 E. Jackson.
Shafer, Mrs. Troy A., 1101 E. Harrison.
Utley, Mrs. R. E., 210 E. Harrison.
Watkins, Mrs. J. C., 522 E. Jackson.

MEMBERS-AT-LARGE, FIFTH AND AND SIXTH DISTRICTS

Beall, Mrs. J. E., Box 116, Pearsall.
Beigfeld, Mrs. Arthur W. C., Box 49, New Braunfels.
Bounstetter, Mrs. H. J., Kennedy.
Frueholz, Dr. Bertha, 305 S. Seguin Ave., New Braunfels.
Goodnight, Mrs. J. E., Box 275, Pearsall.
Heinen, Mrs. Allen I., 1002 College St., Seguin.
Kent, Mrs. C. M., Kennedy.
La Forge, Mrs. Hershell, Uvalde.
Lightsey, Mrs. J. N., Cotulla.
Meredith, Mrs. W. P., 406 E. 6th St., Del Rio.
Oxford, Mrs., Box 186, Floresville.
Rodriquez, Mrs. Simon, 1405 S. Main St., Del Rio.
Tiner, Mrs. E. L., Box 145, Crystal City.
Ware, Dr. Ella, Box 103, Stockdale.
Ware, Mrs. T. P., Poteet.
Williamson, Mrs. J. D., Castroville.
Wright. Mrs. Rennie, 150 S. Seguin Ave., New Braunfels.

SEVENTH OR AUSTIN DISTRICT

Mrs. T. J. McElhenney
Austin
Council Woman

CALDWELL COUNTY AUXILIARY

Coopwood, Mrs. Joe B., Lockhart.
Duboise, Mrs. O. K., Lockhart.
Nichols, Mrs. Clay, Jr., Luling.
O' Banion, Mrs. J. T., Luling.
Pitts, Mrs. M. W., Luling.
Ross, Mrs. A. A., Jr., Lockhart.
Smith, Mrs. Edgar, Lockhart.
Watkins, Mrs. Pruett W., Luling.

TRAVIS COUNTY AUXILIARY[2]

Bailey, Mrs. C. W., 1115 W. 32nd.
Black, Mrs. W. B., 401 W. 32nd.
Blaustone, Mrs. H. H., 1606 Pearl.
Bohls, Mrs. 803 E. 32nd.
Brown, Mrs. M. I., 2509 Indian Trail.
Carter, Mrs. C. E., 603 Carolyn.
Chrisman, Mrs. W. P., Jr., 1602 Preston.
Cleveland, Mrs. G. W., 1101 Eason.
Cloud, Mrs. R. E., 48 Summit View.
Coleman, Mrs. J. M., 2600 Bridle Path.
Cooper, Mrs. R. A., 1411 Newfield Lane.
Cox, Mrs. George, 1512 Forrest Trail.
Crockett, Mrs. J. A., 2510 Exposition Blvd.
Davidson, Mrs. H. T., 1708 Stamford Lane.
Eppright, Mrs. B. R., No. 2 Kenmore Ct.
Esquivel, Mrs. Sandi, 2306 Townes Lane.
Gambrell, Mrs. Wm. M., 2101 Rio Grande.
Gibson, Mrs. J. W., 3406 Duval.
Granberry, Mrs. C. H., 912 W. 6th St.
Gregg, Mrs. Bonner, 2100 Parkway.
Helm, Mrs. T. P., 1626 Palma Plaza.
Holland, Mrs. L. F., 505 W. 13th.
Howze, Mrs. J. E., 308 W. 12th.

[1]Address is Harlingen unless otherwise stated.
[2]Address is Austin unless otherwise stated.

Hudson, Mrs. S. E., 706 San Antonio.
Key, Mrs. S. N., 2314 Woodlawn Blvd.
Klotz, Mrs. H. L., 2200 Griswold Lane.
Kreisle, Mrs. M. F., 811 W. 31st.
McCrummen, Mrs. T. D., 2300 Windsor Rd.
McElhenney, Mrs. T. J., 1511 Rainbow Bend.
Middlebrook, Mrs. F. M., 706 Trinity.
Moore, Mrs. C. F., 1301 Norwalk Lane.
Morgan, Mrs. W. P., 2204 Enfield Rd.
Morris, Mrs. T. W., 1403 Kent Lane.
Murray, Mrs. R. V., 408 W. 32nd.
Nanney, Mrs. A. L., 3005 Bridle Path.
Neighbors, Mrs. A. H., 1803 West Ave.
Nichols, Mrs. J. B., 800 Rio Grande.
Perkins, Mrs. H. C., 807 Leonard.
Richardson, Mrs. Dalton, 1111 W. 11th.
Robison, Mrs. J. T., 1109 Gaston Ave.
Schiller, Mrs. N. L., 1606 Preston.
Shipp, Mrs. R. W., 306 W. 8th.
Smith, Mrs. H. E., 1508 W. 30th.
Terry, Mrs. A. A., 2000 Parkway.
Thomas, Mrs. J. C., 3 Niles Road.
Thompson, Mrs. Burch, 2104 Sabine.
Walter, Mrs. L. P., 2800 Enfield Rd.
Willess, Mrs. H. F., 827 Harris Ave.
Wilson, Mrs. R. T., 2506 Spring Lane.
Woolsey, Mrs. S. A., 509 W. 12th.

LAMPASAS-BURNET-LLANO COUNTIES AUXILIARY

*Allen, Mrs. George Scott, Burnet.
Brook, Mrs. W. M., Lampasas.
*Rollins, Mrs. H. B., Lampasas.
Shepperd, Mrs. Joe Arthur, Burnet.
Shepperd, Mrs. Roy R., Burnet.
Vaughn, Mrs. T. D., Bertram.

MEMBERS-AT-LARGE, DISTRICT VII

Atkinson, Mrs. O. B., Florence.
Bryson, Mrs. J. Gordon, Bastrop.
DeSteiger, Mrs. J. R., San Marcos.
Flannery, Mrs. John J., Blanco.
Gregg, Mrs. D. B., Round Rock.
Hock, Mrs. Charles M., Sr., Smithville.
Hock, Mrs. Charles M., Jr., Smithville.
Johns, Mrs. J. J., Taylor.
Kirkpatrick, Mrs. B. A., Taylor.
Kroulik, Mrs. Frank J., Smithville.
Lauderdale, Mrs. Clay, Buda.
Montzel, Mrs. S. W., Giddings.
Morten, Mrs. John R., Georgetown.
Morton, Mrs. John R., San Marcos.
Sharp, Mrs. M. R., Granger.
Smith, Mrs. J. A., Burnett.
Stromberg, Mrs. Eric W., Taylor.
Williams, Mrs. M. C., San Marcos.
York, Mrs. W. E., Giddings.

EIGHTH OR DeWITT DISTRICT

Mrs. R. M. Milner
Yoakum
Council Woman

DEWITT-LAVACA COUNTIES AUXILIARY

Blackwell, Mrs. F. D., Hochheim.
Boyle, Mrs. J. W., Shiner.
Brown, Mrs. H. H., Jr., Yoakum.
Brown, Mrs. H. H., Sr., Yoakum.
Burns, Mrs. J. W., Cuero.
Burns, Mrs. Helen, Cuero.
Bohman, Mrs. A. J., Cuero.
Davis, Mrs. Merle B., Hochheim.
Douthit, Mrs. W. E., Cuero.
Duckworth, Mrs. M. G., Cuero.
Dufner, Mrs. C. T., Hallettsville.
Gray, Mrs. J. D., Yoakum.
Marek, Mrs. E. H., Yoakum.
Milner, Mrs. R. M., Yoakum.
Palmer, Mrs. C. A., Yoakum.
Pulkrabek, Mrs. E. H., Yoakum.
Renger, Mrs. Harvey, Hallettsville.
Renger, Mrs. Paul, Sr., Hallettsville.
Renger, Mrs. Paul, Jr., Hallettsville.
Richter, Mrs. L. B. S., Yoakum.
Strieder, Mrs. H. J., Moulton.
Wagner, Mrs. F. M., Shiner.

WHARTON-JACKSON-MATAGORDA-FORT BEND COUNTIES AUXILIARY

Bauknight, Mrs. J. M., Ganado.
Black, Mrs. Vernon A., Wharton.
Blair, Mrs. W. M., Wharton.
Blasingame, Mrs. F. J. L., Wharton.
Davidson, Mrs. T. L., Wharton.
Johnson, Mrs. R. G., New Gulf.
Kuykendall, Mrs. H. D., Sugar Land.
McGee, Mrs. Borden M., Rosenberg.
Neal, Mrs. T. M., Rosenberg.
Nichols, Mrs. C. V., Richmond.
*Outlar, Mrs. L. B., Wharton.
Reeves, Mrs. H. V., El Campo.
Roche, Mrs. Buell F., Bay City.
Rubeley, Mrs. Frank R., Wharton.
Schulze, Mrs. G. A., El Campo
Shoultz, Mrs C. A., Bay City.
Simons, Mrs. B. E., Bay City.
Simons, Mrs. J. W., New Gulf.
Thiltgen, Mrs. W. S., El Campo.
Wagner, Mrs. J. R., Palacios.
Weinheimer, Mrs. E. A., El Campo.
Whitfield, Mrs. W. E., Edna.
*Giddings, Mrs. H. D., El Campo.

*Members on leave.

MEMBERS-AT-LARGE DISTRICT EIGHT[1]

DeTar, Mrs. Adrian.
Hopkins, Mrs. J. W.
Moseley, Mrs. R. W.
Owen, Mrs. Adrian.
Shields, Mrs. Allen.
Shields, Mrs. Fred.

NINTH OR SOUTHERN DISTRICT

Mrs. L. L. D. Tuttle
Houston
Council Woman

AUSTIN-WALLER COUNTIES AUXILIARY

Brown, Mrs. Walter T., Wallis.
Gordon, Mrs. Virgil L., Sealy.
Hover, Mrs. Frank W., Sealy.
*Jones, Mrs. Malcolm A., Hempstead.
Neely, Mrs. J. Allen, Bellville.
Roensch, Mrs. Herbert E., Bellville.
Steck, Mrs. Otto E., Bellville.
Walker, Mrs. S. C., Hempstead.

GALVESTON COUNTY AUXILIARY[2]

Aves, Mrs. Fred, LaMarque.
Brindley, Mrs. Paul, 4306 Sherman.
Cone, Mrs. Robert E., 2602 Ave. O.
Cooke, Mrs. Willard, 4510 Caduceus.
Cruce, Mrs. Wm. B., 919 18th N., Texas City.
Decherd, Mrs. Geo. M., 5023 Ave N½.
Eggers, Mrs. G. W. N., 4625 Caduceus.
Ewalt, Mrs. Jack R., 24 Cedar Lawn.
Fowler, Mrs. Frederick, 3509 Ave. P.
Frank, Mrs. T., Texas City.
Frazier, Mrs. Chester, 4315 Sherman.
Gammon, Mrs. Wm., 63 Cedar Lawn.
Garbade, Mrs. F. A., 4515 Ave. N.
Gregory, Mrs. Raymond, 1419 24th.
Hansen, Mrs. Arild, 55 Cedar Lawn.
Harris, Mrs. L. R., 702 Market.
Harris, Mrs. Titus, 1428 Broadway.
Harris, Mrs. Sarah, 2725 Broadway.
Herrmann, Mrs. Geo., 1409 Market.
Jarrell, Mrs. Norman, 304 9th Ave., Texas City.
Johnson, Mrs. Jesse B., 4627 Sherman.
Jinkins, Mrs. J. L., 3121 Ave. P.
Klatt, Mrs. Emil H., 1605 Tremont.
Knight, Mrs. H. C., 3120 Ave. Q.
Knight, Mrs. Maynard, 923 Mechanic.
Kleberg, Mrs. Walter, 2221 35th.
Kolb, Mrs. Weldon, 4902 Wharton.
Lee, Mrs. Geo., 4600 Caduceus.
Lefeber, Mrs. Ed. J., 409 14th.
Levin, Mrs. Wm. C., 4828 Wharton.
McGivney, Mrs. John, 5005 Crockett.
McKinley, Mrs. Frank, 903 C.
McLarty, Mrs. E. S., Buccaneer Hotel.
McReynolds, Mrs. G. W., 20 Cedar Lawn.
Magliolo, Mrs. J. C., Dickinson, Dickinson.
Mares, Mrs. C. F., 4802 Denver.
Marr, Mrs. Wm., 4602 Ave. P.
Otto, Mrs. John, 4802 Sherman.
Perlman, Mrs. Bernard, 501 7th St.
Potter, Mrs. Wm. B., 3807 Ave S.
Randall, Mrs. Ed. Sr., 2004 Broadway.
Ritchie, Mrs. E. B., 1702 Ball.
Randall, Mrs. Ed. Jr., 3502 Ave. P.
Robinson, Mrs. H. Reid, 3420 Ave. O.
Ross, Mrs. Lamar, 4627 Ave. R½.
Ruskin, Mrs. Arthur, 1615 Ave. E.
Schmidt, Mrs. H. A., 113 10th, Texas City.
Schwab, Mrs. Ed., 2 Cedar Lawn.
Singleton, Mrs. A. O., 1602 Broadway.
Slocum, Mrs. H. C., 1128 Blvd.
Snodgrass, Mrs. S. R., 1217 Market.
Stone, Mrs. C. T., 11 Cedar Lawn.
Sykes, Mrs. Clarence, 4628 Sherman.
Sweet, Mrs. H. H., 915 8th St.
Thiel, Mrs. John M., 2928 Broadway.
Thompson, Mrs. Ed R., 1508 Broadway.
Twidwell, Mrs. Leonard, Texas City.
Wall, Mrs. Dick P., 1202 Broadway, Texas City.
[1]Wallace, Mrs. W. S., 2525 Broadway.
Weaver, Mrs. John D., 4409 Ave. S.
Weisz, Mrs. Stephen, 1002 Ave. J.

[1]Address is Victoria unless otherwise stated.
*Members on leave.
[2]Address is Galveston unless otherwise stated.

HARRIS COUNTY AUXILIARY†

*Adam, Mrs. G. F., 3025 Binz.
Adams, Mrs. G. Q., 1932 Dryden.
Alexander, Mrs. H. L., 3210 Parkwood.
*Alexander, Mrs. J. C.
*Andrews, Mrs. T. A.
Armentrout, Mrs. C. R., 3229 Calumet.
Arnold, Mrs. E. M., 2536 Prospect.
Ashmore, Mrs. C. M., 2305 Watts.
*Austraw, Mrs. H. H., 2224 Dorrington.
Aves, Mrs. C. M., 1749 South Blvd.
Aydam, Mrs. C. W., 307 West Pierce.
Baird, Mrs. V. C., 3701 Del Monte.
*Barkley, Mrs. H. T.
Barnes, Mrs. J. P., 3651 Olympia.
Barrett, Mrs. J. E., 1841 Palm.
Bell, Mrs. J. E., 3344 Charleston.
*Bell, Mrs. W. E., 1933 Norfolk.
Berry, Mrs. C. R., 3202 Oakmont.
Bertner, Mrs. E. W., Rice Hotel.
Best, Mrs. P. W., Warwick Hotel.
*Billups, Mrs. J. T.
Blair, Mrs. L. C., 3406 Georgetown.
*Bloom, Mrs. F. A.
Bloxsom, Mrs. A. P., 2240 Chilton.
*Blundell, Mrs. J. R., 2220 Stanmore.
Bonham, Mrs. R. F., Box 6237.
Bost, Mrs. J. R., 2941 Chevy Chase.
*Bourdon, Mrs. L. L., 2315 Watts.
Bowen, Mrs. R., 3509 Montrose.
Bowen, Mrs. S., 5000 Montrose.
Boyd, Mrs. A. N., 3117 Avalon.
Braden, Mrs. A. H., 2351 Kelvin.
*Bradford, Mrs. K. F.
*Brady, Mrs. R. J., 605 East Cottage.
Brandau, Mrs. G. H., 409 West Pol.
*Brannon, Mrs. J. G., 119 West Alabama.
Bressler, Mrs. J. L., 2346 Tangley.
Brohn, Mrs. A. J., 103 Morris.
*Brown Mrs. J. A., 710 Pacific.
*Brown, Mrs. J. W.
Bruder, Mrs. W. H., 245 West 18th.
Bruhl, Mrs. C. E., 1607 North Blvd.
*Bruhl, C. K., 1607 North Blvd.
Bryan, Mrs. W. G., 4820 San Jacinto.
Bukowski, Mrs. L. M., 2203 Dunraven.
Burge, Mrs. C., 2214 North Blvd.
Burke, Mrs. T. W., 3402 Wickersham.
*Burr, Mrs. H. B., 6407 Peerless.
Calhoun, Mrs. C. A., 2152 Pelham.
*Campbell, Mrs. W. C.
Caplovitz, Mrs. H., 2102 Tangley.
*Carrico, Mrs. C. C., 2408 Reba.
Chunn, Mrs. E. K., 2433 Glenhaven.
*Clapp, Mrs. J. A.
Clarke, Mrs. H. H., 2015 Dryden.
Clarke, Mrs. Jared E., 2124 Inwood.
*Cohen, Mrs. Raymond, 709 Avondale.
Cole, Mrs. W. Frank, 3201 Amherst.
*Collette, Mrs. Allan, 1002 Bissonet.
Compere, Mrs. T. H., 2631 Fernwood.
*Connor, Mrs. W. Harris, 2910 Sunset.
Coogle, Mrs. C. P., 2220 Naroneal.
Coole, Mrs. Walter A., 102 Portland.
Coop, Mrs. B. F., 1536 Heights Blvd.
Cope, Mrs. R. Louis, 6605 Meadow Lawn.
Coulter, Mrs. W. W., 1705 Ewing.
Crigler, Mrs. Cecil M., 3617 Olympia.
Crocker, Mrs. Ed., 2906 Wichita.
*Cronin, Mrs. Thomas D., 2123 Maroneal.
Cruce, Mrs. P. R., 2440 Del Monte.
*Cummings, Mrs. Hatch W.
*Cunningham, Mrs. G. N., 2106 Colquitt.
*Curb, Mrs. Dolph.
*Cutler, Mrs. Hayden H.
*Dailey, Mrs. J. Emerson.
Daniel, Mrs. Joe E., 4500 Rossmoyne.
Dargan, Mrs. J. L., 2008 Milford.
David, Mrs. S. D., 4003 Mount Vernon.
*Davis, Mrs. C. Q.
Denman, Mrs. Peyton R., 1220 Southmore.
DeVore, Mrs. Neal M., 1971 W. McKinney.
Dickson, Mrs. J. C., 5310 Mandell.

[1]Died March 5, 1945.
*Members on leave.
†Address is Houston unless otherwise stated.

Dipple, Mrs. A. Louis, 2521 Stanmore.
*Doak, Mrs. N. P., 2230 Branard.
Doak, Mrs. Edmond K., 2105 Dunstan.
*Donovan, Mrs. Thomas J.
*Duggan, Mrs. Leroy.
Dunstin, Mrs. Herman E., 1118 Wheeler.
Durham, Mrs. Mylie E., 730 W. 43rd.
Durrance, Mrs. Fred Y., 2124 Albans.
Ehlers, Mrs. H. J., 2112 Brentwood.
*Eidman, Mrs. F. G., 1449 Lawson.
*Embree, Mrs. Elisha D., 1915 Branard.
Englehardt, Mrs. M. A., 2208 Southmore.
Ernst, Mrs. Frank J., 4313 Rossmoyne.
*Estes, Mrs. Berthold, 3746 Darcus.
Farfel, Mrs. Bernard, 3342 Wichita.
*Faris, Mrs. Arthur M., 2033 Norfolk.
Feagin, Mrs. Horace C., 3806 Garrett.
Filippone, Mrs. John M., 623 Hawthorne.
Finney, Mrs. R. Milton, 1936 Rice Blvd.
Fisher, Mrs. Wilton M., 1818 West Clay.
Fitch, Mrs. Edward O., 1832 Kirby.
Flynt, Mrs. Otis P., 509 Avondale.
*Foote, Mrs. Stephen A.
Foster, Mrs. Joe B., 2020 West Main.
Freundlich, Mrs. Thomas, 419 Avondale.
Gandy, Mrs. D. Truett, Bunker Hill Road.
Gandy, Mrs. Joe R., 2104 Pine Valley.
Gantt, Mrs. Albert M., 2901 Telephone.
Gardner, Mrs. Herman L., 2247 North Blvd.
Gaston, Mrs. John Zell, 2210 Riverside.
Gates, Mrs. C. S., 3119 Avalon.
*Glenn, Mrs. J. K.
Goar, Mrs. E. L., 3202 Huntington.
*Graves, Mrs. G., 3415 Garrett.
Graves, Mrs. M. L., 11 Shadowlawn.
Green, Mrs. C. C., 5328 Institute Lane.
Greene, Mrs. J. A., 2512 Southmore.
Greenwood, Mrs. J. Sr., Route 3, Old Main St. Road.
Greenwood, Mrs. J. Jr., 3666 Chevy Chase.
Greer, Mrs. A. E., 1715 North Blvd.
Greer, Mrs. C., 7430 Harrisburg Blvd.
Griffey, Mrs. E. W., 2218 Troon.
Griswold, Mrs. C. M., 2121 Brentwood.
Grunbaum, Mrs. F. V., 2335 Maroneal.
*Guthrie, Mrs. T.
Haden, Mrs. H. C., 3704 Montrose.
Haley, Mrs. S. W., 1915 Temple.
*Hamilton, Mrs. C. R., 5212 Caroline.
Handley, Mrs. L. L., 716 West Alabama.
*Hardy, Mrs. S. B., 1406 Vassar.
Harris, Mrs. C. P., 11 Chelsea.
Harris, Mrs. F., 2404 Inwood.
*Harris, Mrs. H. H.
Harris, Mrs. J. W., 4237 Brentwood.
*Hauser, Mrs. A.
*Heard, Mrs. J. G., 3059 Reba.
*Henderson, Mrs. D. G.
*Hild, Mrs. J.
*Hill, Mrs. J. M.
Hinds, Mrs. G. F., 2207 Bolsover.
Hines, Mrs. N., 2322 Southgate.
Hodell, Mrs. G. R., 2501 Dryden.
Hodges, Mrs. J. E., 2815 Main.
Hoeflich, Mrs. C. W., 1603 McGowen.
Holland, Mrs. T. L., 3838 Olympia.
*Hollimon, Mrs. J. H., 4518 Dixie.
Holloran, Mrs. R. J., 1223 West Gray.
Hollub, Mrs. C. J., 2702 Barbee.
*Motchkiss, Mrs. D. H., Jr.
Howard, Mrs. A. P., 3608 Audubon.
Huffman, Mrs. M. M., 2215 North Blvd.
*Hughes, Mrs. F. M., 3604 University.
Iiams, Mrs. F. J., 2346 North MacGregor.
Janse, Mrs. H. M., 3658 Del Monte.
Johnson, Mrs. H. W., 4510 Caroline.
*Johnson, Mrs. R. M.
Johnson, Mrs. S., 3111 University.
Johnston, Mrs. R. A., 7 Shadowlawn.
*Jones, Mrs. J. R.
*Jorns, Mrs. C. F., 4426 Pease.
Kennerly, Mrs. T., Parklane Apartments.
Karbach, Mrs. N. W., 3205 Del Monte.
Karnaky, Mrs. K. J., 2511 Arbor.
Kilgore, Mrs. F. H., 5320 Calhoun.
*Kerr, Mrs. D., 1924 Braeswood.
Kilgore, Mrs. Morris, 2347 Addiston.
Kincaid, Mrs. Harvey L., 2423 Dryden.
*Kirkham, Mrs. H. L. D.
*Kirkpatrick, Mrs. L. P., 2924 Ella Lee Lane.
*Klanke, Mrs. C. W.
*Knolle, Mrs. Guy E., 2028 Timber Lane.
Kyle, Mrs. J. Allen, 1702 Main.
Lancaster, Mrs. E. H., 2617 Riverside.
Lapat, Mrs. William, 2301 Maroneal.
*Larsen, Mrs. Reuben L.
Latimer, Mrs. Mark H., 1912 North Blvd.
*Lawrence, Mrs. B. A., 2905 Wichita.
Lechenger, Mrs. G. C., 4819 Caroline.
Ledbetter, Mrs. A. A., 3262 Reba.
Ledbetter, Mrs. Paul V., 3508 Inwood.
Levy, Mrs. M. D., 5301 Institute Lane.
*Lewis, Mrs. Everett B., 1712 Banks.
Lewis, Mrs. L. R., Memorial Drive.
Liles, Mrs. Ralph, 5104 Caroline.
Lister, Mrs. S. M., 4209 Montrose.
Logue, Mrs. Lyle J., 3340 Del Monte.
*Lowe, Mrs. T. E.
Lucas, Mrs. J. B., 421 West 20th.
Lummis, Mrs. Fred R., 3921 Yoakum.
Madsen, Mrs. A. C., 5328 Calhoun.
Maresh, Mrs. Henry R., 2416 Riverside.
Maresh, Mrs. R. E., 1627 South Blvd.
*Margraves, Mrs. R. D., 2428 Reba Drive.
*Marshall, Mrs. Reagan M.
*Martin, Mrs. James R.
*Mayfield, Mrs. J. H.
McAllister, Mrs. F. E., 1215 Bartlett.
*McCulley, Mrs. F. E., 1215 Bartlett.
*McDaniel, Mrs. Shaw, 2231 Southgate.
McDeed, Mrs. W. G., 2111 Sunset.
McGehee, Mrs. G. O., 949 Kirby Drive.
McHenry, Mrs. R. K., 3660 Chevy Chase.
McIndoe, Mrs. Frank W., 2324 Dryden.
*McKeever, Mrs. Duncan C., 2529 Reba.
McMeans, Mrs. R. H., 2217 Pelham.
McMurrey, Mrs. Aleln, 22 Briar Hollow.
McNeil, Mrs. A. S., 1502 Hyde Park.
*McReynolds, Mrs. I. S., 3617 Iverness.
*Melton, Mrs. W. Truett.
Messer, Mrs. J. N., 2612 South Calumet.
*Meynier, Mrs. M. J., Jr.
Miller, Mrs. A. L., 1245 Yale.
Milliken, Mrs. Gibbs, 3120 S. McGregor.
Moers, Mrs. Edwin A., 3204 Shenandoah.
Molloy, Mrs. James P., 2624 Prospect.
*Mood, Mrs. George F.
Moore, Mrs. John T., 1709 Sunset.
Morse, Mrs. Walter, 1612 Castle Court.
Moursund, Mrs. W. H., 2113 Milford.
Myers, Mrs. Claude D., 2104 Pelham.
*Nester, Mrs. Char. R., 3440 Oakdale.
*Ohlhausen, Mrs. S. G.
*Oliver, Mrs. J. Stanley, 7441 Walker.
Orman, Mrs. McDonald, 2335 Glen Haven.
Overgaard, Mrs. A. P., 3901 Austin.
Owen, Mrs. George, 612 Hathaway.
*Page, Mrs. J. Herbert.
Parr, Mrs. L. H., 1510 McDuffie.
Parsons, Mrs. A. M., 6 West Lane.
Patrick, Mrs. Ralph C., 5055 Calhoun.
*Patteson, Mrs. J. L., 5802 Irvington.
Pawelek, Mrs. I. L., 3009 Avalon.
Perdue, Mrs. George W., 2218 West Main.
*Peterson, Mrs. Carl A., Long Point Witt Road.
Petersen, Mrs. Henry A., 3919 Mount Vernon.
*Phelps, Mrs. Kenton.
Phillips, Mrs. John R., 5806 Bayou Road.
*Pittman, Mrs. James E., 3220 Binz.
Podesta, Mrs. Louis N., 3709 Montrose.
Potts, Mrs. Charles R., 3 Briar Hollow Lane.
Powell, Mrs. Norborne B., 3002 San Filipe.
Poyner, Mrs. Herbert F., 2248 Chilton.
Prince, Mrs. Homer E., 2125 Belsover.
*Pugsley, Mrs. Cornelius.
Purdle, Mrs. Robert M., 6816 Staffordshire.
Qualtrough, Mrs. Walter F., 28 Briar Hollow Lane.
Rader, Mrs. Jon F., 3751 Charleston.
Ramsey, Mrs. W. E., 2016 Alabama.
Raney, Mrs. Lovel W., 2901 Avalon.
Ray, Mrs. John Wyeth, 3919 Palm.
Red, Mrs. W. S., Jr., 1936 Larchmont.
Reece, Mrs. Chas. D., 2031 Banks.
Renfrow, Mrs. W. Frank, 2510 Del Monte.
Robbins, Mrs. E. F., 2916 Chevy Chase.
*Robertson, Mrs. R. C. L.
*Robinett, Mrs. J. B., Jr., 3136 Oakdale.
*Rohrer, Mrs. G. E., Jr., 1903 Sul Ross.
Ruiz, Mrs. John J., 8246 Park Place Blvd.
*Rumph, Mrs. Q.
Rushing, Mrs. John B., 5519 Ardmore.
Russell, Mrs. Thos. G., 1947 Lexington.
Sacco, Mrs. Allan C., Memorial Drive.
*Salerno, Mrs. Jos. P., 1401 Vassar.
*Salinger, Mrs. A., 3420 Roseland.
Salmon, Mrs. Geo. A., 1220 Bartlett.
Sanders, Mrs. Chas. B., 6 Courtland.
*Sanderson, Mrs. T. A.
Scardino, Mrs. P. H., 4520 Rossmoyne.
Schilling, Mrs. John G., 2115 Arbor.
*Schultz, Mrs. Jacob F.
*Scott, Mrs. Dan W., 2041 Claremont Lane.
*Seale, Mrs. Everett.
Sinclair, Mrs. T. A., 1801 Heights Blvd.
Skogland, Mrs. J. E., 3805 Marlowe, 5.
Slataper, Mrs. F. J., 2001 Wentworth.
Smith, Mrs. B. F., 8 Chelsea.
*Smith, Mrs. Burt B.
Smith, Mrs. Clifford T., 2420 Brentwood.
Smith, Mrs. Edward T., 2120 Brentwood.
Smith, Mrs. J. M., 4361 Blodgett.
Spiller, Mrs. J. B., 4701 Austin.
Spurlock, Mrs. G. H., 3240 Del Monte.
*Stackhouse, Mrs. H., Jr., 2331 Dryden.
Stalnaker, Mrs. P. R., 5401 San Jacinto.
Stevenson, Mrs. W. M., 2423 Pelham.
*Stork, Mrs. W. J., 3810 Fannin.
Stough, Mrs. J. T., 2210 Dryden.
*Strashun, Mrs. M. F., Plaza Hotel.
Strassmann, Mrs. E. O., 2310 Binz.
Strozier, Mrs. W. M., Luthe Road.
*Swetland, Mrs. D. R.
Tackaberry, Mrs. A. L. W., 324 Hathaway.
Talley, Mrs. A. T., 2128 Southmore.
*Theriot, Mrs. J. R., Jr., 1220 Colquitt.
Thomas, Mrs. C., 4511 Rossmoyne.
Thorn, Mrs. S. W., 3140 Oakdale.
*Thorning, Mrs. W. B., Jr.
Thorning, Mrs. W. B., Sr., 3602 Graustark.
Toland, Mrs. W. A., 4501 Caroline.
Trible, Mrs. J. M., 2402 Calumet.
Truitt, Mrs. J. J., 2619 Grant.
*Tucker, Mrs. J. N., 3609 Piping Rock.
Turner, Mrs. B. W., 2947 Inwood.
*Turner, Mrs. C. G.
Tusa, Mrs. T. S., 1624 Richmond.
Tuttle, Mrs. L. L. D., 2223 Inwood.
*Vanzant, Mrs. T. J.
*Vaughn, Mrs. L. M.
Wachsman, Mrs. D. V., 5510 Jackson.
Waldron, Mrs. G. W., 3659 Inwood.
*Wall, Mrs. J.
Wallis, Mrs. M., 2031 Sunset.
Warner, Mrs. C. M., 3256 Reba.
Warner, Mrs. L. M., 2912 Ella Lee Lane.
*Weil, Mrs. S. D.
*Weisinger, Mrs. R.
Welsh, Mrs. H. C., 218 West Main.
*Whitsitt, Mrs. J. J., 4824 La Branch.
Wible, Mrs. D. J., 2112 Inwood.
Wilson, Mrs. C., 1512 West Alabama.
Wigby, Mrs. T. E., 2043 Goldsmith.
*Williford, Mrs. L. E., 2529 Yupon.
*Wills, Mrs. S., 5327 Mandell.
*Wolf, Mrs. E. T.
Wootters, Mrs. J. H., 2119 Pine Valley.
*York, Mrs. B. P.
Young, Mrs. C. D., 3325 Del Monte.
*Youngblood, Mrs. J. C., 3011 Ella Lee Lane.
Zarr, Mrs. L., 3330 Del Monte.

Affiliated Members

Bennett, Mrs. W. H., Humble.
Hampil, Mrs. C. C., Brazoria.
*McFarling, Mrs. J. E., Humble.
McWilliams, Mrs. H. K., Wallter.
Pope, Mrs. A. E. C., Crosby.
Sandlin, Mrs. J. W., 2175 North St., Beaumont.
Stewart, Mrs. J. M., Katy.
[1]Hayes, Mrs. Herbert T., 3603 Overbrook, Houston.

MADISON-WALKER COUNTIES AUXILIARY†

Angier, Mrs. E. L.
Barnes, Mrs. Luther.
*Barnes, Mrs. Sam, Trinity.
Black, Mrs. Ray.
*Bush, Mrs. L. E.
Curtis, Mrs. M. E.
*Garrett, Mrs. John C.
Goodrich, Mrs. W. A.
*Heath, Mrs. Jesse, Madisonville.
Martin, Mrs. J. R.
Morris, Mrs. J. E., Madisonville.
*Praytor, Mrs. M. E.
Robertson, Mrs. Harry.
*Thomason Mrs. (Dr.) Elizabeth C.
Thomason, Mrs. John W.
Thornton, Mrs. H. H., Trinity.
Veazey, Mrs. W. B.

BRAZORIA COUNTY AUXILIARY

Greenwood, Mrs. W. M., West Columbia.
Hayes, Mrs. C. J., Alvin.
Holt, Mrs. W. C., Angleton.
Laurie, Mrs. B. E., Sweeny.
Merz, Mrs. H. E., Alvin.
McCary, Mrs. A. O., Freeport.
McCary, Mrs. R. M., Freeport.
Miller, Mrs. R. C., Lake Jackson.
Muetz, Mrs. W., Pearland.
Reeves, Mrs. G. D., Freeport.
Ryan, Mrs. W. G., Freeport.
Slaughter, Mrs. S. B., Freeport.

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[1]Deceased.
†Address is Huntsville unless otherwise stated.
*Members on leave.

WASHINGTON COUNTY AUXILIARY[1]

Becker, Mrs. A. E., 606 W 4th.
Burnett, Mrs. M. D., 114 Sycamore.
Fojt, Mrs. R. E., 1400 South Day.
Graber, Mrs. F., 409 West Main.
Hasskarl, Mrs. R. A., P. O. Box 696
Hasskarl, Mrs. W. F., P. O. Box 357.
Hairston, Mrs. T. C., Independence.
Heineke, Mrs. G., 1308 S. Austin.
Knolle, Mrs. Olga, 1008 South Day.
Knolle, Mrs. R. E., 801 S. Clinton.
Knolle, Mrs. W. A., 511 Sycamore.
Kusch, Mrs. G. A. L., Gay Hill.
Lenert, Mrs. R. H., 604 S. Market.
Levin, Mrs. G., 1311½ Bell, Houston.
Lusk, Mrs. H., 415 W. Main.
Miller, Mrs. A. C., Carmine.
Schoenvogel, Mrs. O. F., 112 Mulberry.
Simmons, Mrs. H. G., 617 School.
Southern, Mrs. C. E., Burton.
Stafford, Mrs. S. E.
*Steinbach, Mrs. H. L., 1310 S. Market.
Tottenham, Mrs. W. F., 704 E. Academy.
Toubin, Mrs. S. H., 712 W. Main.
Zeiss, Mrs. G., 201 E. Germania.

TENTH OR SOUTHEASTERN DISTRICT

Mrs. R. C. Bellamy
Daisetta
Council Woman

ANGELINA COUNTY AUXILIARY[2]

Bledsoe, Mrs. R. B., 110 S. Raquet.
Burch, Mrs. Joe, 514 Frank.
Childers, Mrs. D. M., 119 E. Denman.
Clement, Mrs. P. G., 917 S. First.
Denman, Mrs. Linwood, 601 N. First.
Clement, Mrs. J. C., 817 Mantooth.
Duren, Mrs., 422 Montrose.
Estep, Mrs. M. A., 715 Mantooth.
Gibson, Mrs. M. O., 602 N. Second.
Hawkins, Mrs. J. W., 1002 Turner.
Klein, Mrs. James C., 1015 Idlewood.
Peavy, Mrs. J. E., 418 Moore.
Smith, Mrs. David Heaton, 1016 Morningside.
Stewart, Mrs. Huntington.
Sweatland, Mrs. A. E., 804 Frank.
Taylor, Mrs. Robert, 501 Jefferson.
Tinkle, Mrs. L. T., Houston Highway.
Wade, Mrs. J. H., 718 Frank.

HARDIN-TYLER COUNTIES AUXILIARY

Anderson, Mrs. W. W. Kountze.
Barclay, Mrs. Watt, Woodville.
Cruse, Mrs. J. B., Woodville.
Darby, Mrs. T. O., Sour Lake.
Harrison, Mrs. A. W., Woodville.
Mann, Mrs. Jim, Colmesneil.
Poshataske, Mrs. W. J., Silsbee.
Shivers, Mrs. J. F., Woodville.
Tate, Mrs. R. A., Kountze.

JEFFERSON COUNTY AUXILIARY[3]

Alexander, Mrs. H. E., Goodhue Bldg.
*Allison, Mrs. F. Pell.
Autrey, A. R., Adams Bldg., Port Arthur.
Barr, Mrs. R. E., Goodhue Bldg.
*Beyt, Mrs. F. J., 3812 Lakeshore, Port Arthur.
Boring, Mrs. C., Adams Bldg., Port Arthur.
Brandau, Mrs. W. H., San Jacinto Bldg.
Brown, Mrs. W. D., 2290 North.
Bybee, Mrs. J. A., Goodhue Bldg.
*Byram, Mrs. Dan. H.
Byrd, Mrs. Lee Roy, Jr., Gulf Oil Corp., Port Arthur.
Carter, Mrs. John H., San Jacinto Bldg.
Chambers, Mrs. B. F., 449 Fifth Ave., Port Arthur.
*Colby, Mrs. Fred.
*Covode, Mrs. W. M.
Cranger, Mrs. J. C., Goodhue Bldg.
Cunningham, Mrs. M. A., T. B. Hospital.
*Curry, Mrs. Dwight E.
East, Mrs. H. H., 2300 Blk., 4th St., Port Arthur.
Eisenstadt, Mrs. H. B., Bluestein Bldg., Port Arthur.
Elster, Mrs. Benjamin B., Adams Bldg., Port Arthur.
Engledow, Mrs. R. H., 1297 Calder.
*English, Mrs. Dudley.
Ferguson, Mrs. E. C., Goodhue Bldg.
Fett, Mrs. Bennie J., Adams Bldg., Port Arthur.
*Graber, Mrs. W. J.
Granata, Mrs. S. V., San Jacinto Bldg.
Hager, Mrs. D. C., Amer. Natl. Bldg.
Harper, Mrs. J. Y., 849 5th St., Port Arthur.
*Hart, Mr. J. A.
*Heare, Mrs. L. C.
Hendry, Mrs. C. H., Goodhue Bldg.
*Hosen, Mrs. Harris.
Kuhlman, Mrs. Frederick Y., Adams Bldg., Port Arthur.
*Lewis, Mrs. S. J.
Lightfoot, Mrs. W. D., Perlstein Bldg.
Loewenstein, Mrs. Joseph M., 1346 Procter St., Port Arthur.
Mann, Mrs. D. A., Amer. Natl. Bldg.
Meyer, Mrs. Paul R., Adams Bldg., Port Arthur.
Middleton, Mrs. W. C., Perlstein Bldg.
Mills, Mrs. E. D., Amer. Natl. Bldg.
Mixon, Mrs. H. J., Goodhue Bldg.
McRee, Mrs. Edgar C., Medical Bldg., Port Arthur.
Newton, Mrs. W. A., 1495 Fillmore.
*Pace, Mrs. B. F.
*Painton, Mrs. Clifford E.
*Pecora, Mrs. Tony L.
Petit, Mrs. Paul T., Goodhue Bldg.
*Pierson, Mrs. Roger, San Jacinto Bldg.
Powell, Mrs. L. C., San Jacinto Bldg.
Pruit, Mrs. L. T., San Jacinto Bldg.
Raine, Mrs. M. F., 900 9th Ave., Port Arthur.
Raines, Mrs. James M., Adams Bldg., Port Arthur.
Serafino, Mrs. L. C., San Jacinto Bldg.
*Shaddock, Mrs. C. B.
Smith, Mrs. John M.
Smith, Mrs. W. A., Goodhue Bldg.
*Solis, Mrs. G. R.
*Stephenson, Mrs. G. B.
Stoeltje, Mrs. Joe, Goodhue Bldg.
Suehs, Mrs. M. E., Jr., San Jacinto Bldg.
Sutton, Mrs. F. W., Goodhue Bldg.
Tatum, Mrs. W. E., Goodhue Bldg.
Toomin, Mrs. Emanuel, San Jacinto Bldg.
*Tumbleson, Mrs. Talbot A.
Tyndall, Mrs. Thomas N., Nederland.
Vaughan, Mrs. E. W., Adams Bldg., Port Arthur.
Walker, Mrs. Taylor C., San Jacinto Bldg.
Wallace, Mrs. William G., Goodhue Bldg.
White, Mrs. C. M., San Jacinto Bldg.
White, Mrs. J. M., 525 Lake Shore Dr., Port Arthur.
Williford, Mrs. H. B., San Jacinto Bldg.
*Wilson, Mrs. I. G.
Young, Mrs. I. T., Adams Bldg., Port Arthur.

LIBERTY-CHAMBERS COUNTIES AUXILIARY

Bellamy, Mrs. Richard C., Box 326, Daisetta.
Bevil, Mrs. Jack, Hull.
Bridges, Mrs. W. H. (Army), 2515 Mason, Houston.
Carr, Mrs. Frank, Devers.
Delaney, Mrs. A. L., Liberty.
Fahring, Mrs. Geo. H., Anahuac.
Fahring, Mrs. T. Lloyd (Army), Dallas.
Griffin, Mrs. Frank (Army), Alto.
Jordon, Mrs. B. L., Daisetta.
Leggett, Mrs. Walter, Cleveland.
Richter, Mrs. E. R., Dayton.
Shearer, Mrs. A. R., Mont Belvieu.
Sykes, Mrs. Everett W., Anahuac.
Tadlock, Mrs. J. T., Dayton.
Trichel, Miss Ruth (Associate), Houston.

NACOGDOCHES COUNTY AUXILIARY†

Barham, Mrs. George S., 664 North St.
Beall, Mrs. J. Frank, Beall St.
Blackwell, Mrs. T. J., 209 North St.
Campbell, Mrs. George P., 726 North St.
McKinney, Mrs. Edgar P., 138 Bailey Ave.
Middlebrook, Mrs. George F., 805 North St.
Nelson, Mrs. A. Langston, 721 North St.
Neuville, Mrs. C. F., 1002 Raguet St.
Payne, Mrs. C. M., Haywood St.
Pennington, Mrs. T. J., 844 North St.
Smith, Mrs. Clarence, 900 Mound St.
Tucker, Mrs. Felix R., South Fredonia.
Tucker, Mrs. Henry, N. Heights Addn.
Tucker, Mrs. F. H., 1610 Pecan St.
Tucker, Mrs. Stephen B., 1027 Mound St.

MEMBERS-AT-LARGE, DISTRICT TEN

Birdwell, Mrs. J. A., Overton.
Clark, Mrs. Neida H., Overton.
Dean, Mrs. W. N., Overton.
Deason, Mrs. G. A., Henderson.
Graham, Mrs. G. Mason, Bessamy.
Hurst, Mrs. T. L., Center.
Pearce, Mrs. H. W., Orange.
Peebles, Mrs. Felix, Jr., 217 Destroyer Drive, Orange.
Richmond, Mrs. S. M., Orange.
Seale, Mrs. James N., San Antonio.
Shipp, Mrs. L. M., 502 N. High St., Henderson.
Watkins, Mrs. J. E., Henderson.

ELEVENTH OR EASTERN DISTRICT

Mrs. L. B. Windham
Tyler
Council Woman

CHEROKEE COUNTY AUXILIARY

Bullion, Mrs. Chas. H., Timberlawn Sanitarium, Dallas.
Burnett, Mrs. E. W., State Hospital, Rusk.
Cobble, Mrs. T. H., Rusk.
Hall, Mrs. R. L., State Hospital, Rusk.
Johnson, Mrs. J. F., Rusk.
Kuykendall, Mrs. A. L., State Hospital, Rusk.
Lamb, Mrs. Marvis, 631 El Paso St., Jacksonville.
McDonald, Mrs. W. A., Alto.
McDougle, Mrs. J. B., 621 Neches St., Jacksonville.
Scarborough, Mrs. Lee, Rusk.
Sory, Mrs. W. H., 534 East Rusk St., Jacksonville.
Travis, Mrs. J. M., 531 South Ragsdale St., Jacksonville.
Travis, Mrs. L. L., 616 El Paso St., Jacksonville.
Travis, Mrs. R. T., 637 San Antonio St., Jacksonville.
Whitesides, Mrs. W. A., State Hospital, Rusk.

HENDERSON COUNTY AUXILIARY[1]

Baugh, Mrs. J. F., Chandler.
Black, Mrs. W. T., 409 E. Corsicana.
Cockerell, Mrs. L. L., 309 W. Corsicana.
Easterling, Mrs. A. H., 611 E Tyler.
Geddie, Mrs. N. D., 704 S. Palestine.
Henderson, Mrs. R. E., 506 E. College.
Hodge, Mrs. R. H., 710 E. Tyler.
Price, Mrs. D., 615 E. Corsicana.
Wallace, Mrs. B. C., 207 S. Palestine.
Webster, Mrs. J. K., 806 E. Corsicana.
Weekley, Mrs. C. M., 409 E. Corsicana.

SMITH COUNTY AUXILIARY[2]

Bailey, Mrs. W. M., 405 Mockingbird Lane.
Bell, Mrs. G. G., 626 S. Bois d'Arc.
Brown, Mrs. Glynne, 223 E. Second.
Brown, Mrs. Irving, 1221 S. Chilton.
Bryant, Mrs. W. Howard, 832 S. College.
Clawater, Mrs. E. W., 1517 S. Chilton.
Faust, Mrs. J. J., 305 E. Second.
Jarmon, Mrs. Thomas M., Old Bullard Rd.
Marshall, Mrs. R. L., 905 Mockingbird Lane.
McDonald, Mrs. C. C., Highland Park.
Page, Mrs. Roy L., 1900 S. College.
Pope, Mrs. Irvin, Jr., 423 Vine.
Rice, Mrs. E. D., 925 S. Chilton.
Shirley, Mrs. Clayton, 2418 Old Bullard Rd.
Thompson, Mrs. Orion, 318 W. Third.
Willingham, Mrs. C. E., 1202 S. Chilton.
Windham, Mrs. L. B., 600 W. Rusk.
Woldert, Mrs. Albert, 603 W. Woldert.
Young, Mrs. C. B., 929 S. Confederate.

HOUSTON-LEON COUNTIES AUXILIARY[3]

Arledge, Mrs. Roy.
Barcley, Mrs. Sam.
Berry, Mrs. Henry.
Butler, Mrs. C. W.
Butler, Mrs. Joyce.
Cornelious, Mrs. Raymond.
Dean, Mrs. John L.
Downes, Mrs. Lelia.

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[1]Address is Brenham unless otherwise stated.
[2]Address is Lufkin unless otherwise stated.
[3]Address is Beaumont unless otherwise stated.
*Members on leave.

†Address is Nacogdoches unless otherwise stated.

[1]Address is Athens unless otherwise stated.
[2]Address is Tyler unless otherwise stated.
[3]Address is Crockett unless otherwise stated.

Powell, Mrs. E. P.
Shapire, Mrs. M. L.
Shivers, Mrs. James L.
Stokes, Mrs. Paul.

TWELFTH OR CENTRAL DISTRICT

Mrs. Cleveland H. Brooks
Waco
Council Woman

BELL COUNTY AUXILIARY[1]

Anderson, Mrs. H. B., 613 W. Lamar.
Bradfield, Mrs. E. O., 905 N. 4th.
Brindley, Mrs. G. V., 600 W. Garfield.
Bunkley, Mrs. T. F., 1117 N. 9th.
Chernosky, Mrs. W. A., 707 N. 3rd.
Crumpler, Mrs. P., 1105 S. 5th.
Curtis, Mrs. Raleigh, 1919 N. 7th.
Ellis, Mrs. I. D., Troy.
Gober, Mrs. O. B., 404 N. 9th.
[2]Gober, Mrs. O. F.
Greenwood, Mrs. Joe, 815 N. 9th.
Harlan, Mrs. R. K., 1207 N. 3rd.
Howell, Mrs. F. W., 1307 N. 5th.
Longmire, Mrs. V. M., 1309 N. 9th.
Pittman, Mrs. J. W., Belton.
Pollok, Mrs. L. W., 618 N. 13th.
Ramey, Mrs. P. M., 1714 N. 7th.
Robinson, Mrs. J. E., Waco Highway.
Rodarte, Mrs. J. G., 1011 N. 13th.
Scott, Mrs. A. C., Jr., 618 N. 9th.
Sewell, Mrs. H. W., Belton.
Sewell, Mrs. J. G., Belton.
Sherwood, Mrs. M. W., 605 N. 9th.
Simmon, Mrs. V. J., 814 N. 6th.
Speed, Mrs. Terrell, 602 N. 3rd.
Stevenson, Mrs. C. A., 1107 N. 4th.
Stuart, Mrs. L. D., 1210 N. Main.
Wiedeman, Mrs. A. E., 1111 N. 2nd.
Winston, Mrs. J. R., 302 W. French.
Wolf, Mrs. A. F., 318 N. Main.
Woodson, Mrs. Burbank, 1815 N. 7th.
Woodson, Mrs. Palmer, 605 W. Nugent.

BRAZOS-ROBERTSON COUNTIES AUXILIARY[3]

Cline, Mrs. W. B.
*Grant, Mrs. R. B., Jr.
*Harrison, Mrs. R. H., Jr.
Marsh, Mrs. J. E., College Station.
Perry, Mrs. J. S.
Richardson, Mrs. S. C.
Sanders, Mrs. J. G., Bremond.
*Searcy, Mrs. R. M.
*Searcy, Mrs. T. A., Hearne.
Walton, Mrs. T. O., Jr., College Station.
Walton, Mrs. T. T.
Wilkerson, Mrs. L. O.
Woodard, Mrs. P. A., College Station.

FALLS COUNTY AUXILIARY[4]

Barnett, Mrs. J. B.
Barnett, Mrs. J. H.
Buie, Mrs. N. D.
Carter, Mrs. H. G.
Carter, Mrs. L. C.
Collier, Mrs. J. I., Box 477.
Cornwell, Mrs. Charles H.
Davison, Mrs. M. A.
Garrett, Mrs. H. S.
Glass, Mrs. T. G.
Hampshire, Mrs. G. H.
Hutchings, Mrs. E. P.
Hutchings, Mrs. A. M.
Price, Mrs. C. A.
Roach, Mrs. T. S.
Torbett, Mrs. J. W.
Von Toble, Mrs. A. E.

JOHNSON COUNTY AUXILIARY[5]

Carrigan, Mrs. Tom, 804 N. Main.
Curtis, Mrs. J. E., 902 Prairie.
Dennis, Mrs. M., 206 Forest.
Fine, Mrs. Elden, 732 N. Main.
Jowell, Mrs. C. C., Grandview Hy.
Knox, Mrs. M. T., 201 Bellview.
Little, Mrs. J. G., 606 W. Chambers.
Pickens, Mrs. J. W., 302 Forest.
Turner, Mrs. B. H., 201 Featherstone.
Whitehead, Mrs. Gladys, 401 W. Chambers.
Yater, Mrs. T. F., 109 Sunset.

[1]Address is Temple unless otherwise stated.
[2]Deceased.
[3]Address is Bryan unless otherwise stated.
[4]Address is Marlin unless otherwise stated.
[5]Address is Cleburne unless otherwise stated.
*Members on leave.

McLENNAN COUNTY AUXILIARY[1]

Alexander, Mrs. Boyd, 1024 N. 18th.
*Anspach, Mrs. H. M., 2711 Maple.
Aynesworth, Mrs. H. T., 3000 Cumberland.
*Aynesworth, Mrs. M. B., 435 Rice.
Baker, Mrs. M. D., 2806 Washington.
*Barnes, Mr. Maurice C., 2208 Gorman.
Brooks, Mrs. C. H., 2300 Bosque Blvd.
*Bullard, Mrs. Ray, 2602 Fort Avenue.
*Burgess, Mrs. J. L., In Service.
Cannon, Mrs. I. F., Mart.
*Carlisle, Mrs. M. C., In Service.
*Coffelt, Mrs. Ralph, 423 N. 23rd.
Crosthwait, Mrs. W. L., 1104 N. 18th.
Dudgeon, Mrs. H. R., 2200 Gorman.
*Dudgeon, Mrs. H. R., Jr., 2200 Gorman.
Garrett, Mrs. J. M., 2221 Parrott.
Germany, Mrs. H. J., 2324 Bosque Blvd.
Gidney, Mrs. Hayes, West.
Goodman, Mrs. Aubrey L., 3305 Castle.
Hale, Mrs. J. W., 1520 Washington.
Hale, Mrs. Robert A., 1027 S. 5th.
Hanks, Mrs. Robert J., 3222 Cumberland.
*Jaworski, Mrs. H., Temple.
Kirby, Mrs. F. F., 2801 Sanger.
*Kochmann, Mrs. W. P., 3100 Live Oak.
Lattimore, Mrs. John E., 3020 Trice.
*Manske, Mrs. A. O., In Service.
Mewshaw, Mrs. R. E. L., 905 S. 8th.
Milam, Mrs. E. A., 1412 Austin.
Miller, Mrs. C. F., 2120 Fort.
Murphey, Mrs. Paul C., 3100 Maple.
*Oliver, Mrs. Tom, 2029 Washington.
Powell, Mrs. E. V., Lake Waco.
Power, Mrs. Paul H., Mail: 1011 Professional Bldg.
Roddy, Mrs. Louis H., 210 Oriental Rd.
*Sadler, Mrs. Leslie, 3400 Chateau.
*Simpson, Mrs. Neill, Hardin Apts.
Smith, Mrs. Ed, 1226 Herring.
Souther, Mrs. W. L., 2005 N. 7th.
Spencer, Mrs. Shelby C., 419 N. 23rd.
*Traylor, Mrs. C. J., In Service.
Trice, Mrs. W. G., 414 N. 23rd.
Warren, Mrs. D. D., 1322 Washington.
*Wells, Mrs. W. H., In Service.
Witte, Mrs. W. S., Palm Courts.
Wood, Mrs. R. Spencer, 3200 S. 3rd.
Wood, Mrs. W. A., 3100 Morrow.
Woolsey, Mrs. W. J., Lake Waco.

Associate Members

Reese, Mrs. Walter L., Sr., 1616 N. 5th.
Siler, Mrs. Ivey Wood, 2004 Columbus.
Simpson, Mrs. J. W., 2901 Lasker.

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Goodall, Mrs. Van Dorne.
Laird, Mrs. J. S., Veteran's Hospital, Waco.
Watman, Mrs. M., Veteran's Hospital, Waco.
*Witcher, Mrs. S. L.

THIRTEENTH OR NORTHWESTERN DISTRICT

Mr. E. Roy Townsend
Eastland
Council Woman

BAYLOR-KNOX-HASKELL COUNTIES AUXILIARY

Barber, Mrs. L. A., Seymour.
Edwards, Mrs. T. S., Knox City.
Eiland, Mrs. D. C., Munday.
Frizzell, Mrs. T. P., Knox City.
Rogers, Mrs. M. W., Rule.
Scott, Mrs. F. C., Haskell.
Williams, Mrs. T. W., Haskell.

TARRANT COUNTY AUXILIARY[3]

Allison, Mrs. W. L., 4503 Norma St.
Anderson, Mrs. J. V., 1308 Hemphill St.
Anderson, Mrs. R. B., 4109 El Campo.
Andujar, Mrs. J. J., 2951 Benbrook Blvd.
Anthony, Mrs. E. E., Jr., 1210 W. Jessamine.
Antweil, Mrs. A., 1919 Forest Park Blvd.
Armstrong, Mrs. W. F., 2432 Medford Ct. East.
Baker, Mrs. R. G., 5824 El Campo Ter.
*Bailey, Mrs. N. R.
Ball, Mrs. B. C., 6128 Highland.
Ball, Mrs. C. E., 4208 Lone Oak Drive.
Barcus, Mrs. W. S., 2020 Hillcrest.
Barcus, Mrs. J. R., 1713 Ashland.
*Barker, Mrs. Bob.
Beall, Mrs. F. C., 1420 N. Ballinger.
Beall, Mrs. K. H., 1600 Sunset Ter.
Beavers, Mrs. G. H., 46 Valley Ridge Rd.
Bennett, Mrs. Jerrell, 3501 Bellaire Dr. S.
Bond, Mrs. T. B., 815 Medical Arts Bldg.
*Borough, Mrs. L. D.
*Brasher, Mrs. Ray.
*Brewster, Mrs. Burke, 2562 Boyd.
Brown, Mrs. J. H., 2409 Medford Ct. W.
Brown, Mrs. W. P., Rt. 6, Box 472, Denton Rd.
Campbell, Mrs. J. F., 2703 Scott.
*Cassidy, Mrs. J. M., 3232 University Pl.
Carpenter, Mrs. N. C., 3612 Potomac.
Chambers, Mrs. J. O., 3715 Lenox.
Cheatham, Mrs. T. H., 2124 Park Place.
*Chorn, Mrs. E. H.
*Church, Mrs. J. M.
Clayton, Mrs. C. F., 5930 White Settlement.
*Cochran, Mrs. J. R.
Cohn, Mrs. M. H., 2420 Wabash.
Covert, Mrs. J. D., 1508 Hemphill.
Crabb, Mrs. M. H., 3613 Park Hill Drive.
Cross, Mrs. T. J., 2424 Lofton Ter.
Daly, Mrs. Jack, 2200 Huntington Lane.
Davis, Mrs. Edwin, 1320 Washington.
*Davis, Mrs. Haywood.
Day, Mrs. G. W., 3932 Modlin.
Deaton, Mrs. H. O., 1221 Clara St.
Ditto, Mrs. H. H., 108 North Bailey.
Doss, Mrs. A. K., 2701 Benbrook Blvd.
Douglass, Mrs. H. C., 3712 Bellaire Dr. N.
Duringer, Mrs. W. C., 2508 Ryan Place.
Emery, Mrs. O. J., 2120 Tremont.
Enloe, Mrs. G. R., 607 Rivercrest Dr.
*Eschenbrenner, Mrs. J. W., Jr.
*Farrington, Mrs. N. C.
*Fershtand, Mrs. J. B.
Francis, Mrs. F. W., 2614 Kensington Dr.
*Garnett, Mrs. J. W.
Garrett, Mrs. C. C., 4800 Byers.
Grammer, Mrs. J. H.
Givens, Mrs. J. M., 127 W. Broadway.
Godley, Mrs. L. O., 2129 Park Place.
Goldberg, Mrs. A. I., 1937 Forest Pk. Blvd.
Gough, Mrs. R. H., 2211 Pembroke Dr.
Griffith, Mrs. M. A., 2110 Roosevelt.
Grogan, Mrs. O. R., 3200 Avondale.
Grogan, Mrs. R. L., 3009 Simondale Dr.
Guerra, Mrs. R. L., 1509 Ellis.
Hall, Mrs. E. P., Sr., 2233 Hemphill.
*Hall, Mrs. E. P., Jr.
*Hallmark, Mrs. J. A., 2710 Simondale Dr.
*Halpin, Mrs. F. W.
Harper, Mrs. H. W., 2741 Fifth Ave.
Harris, Mrs. Earl, 2005 Warner Rd.
*Hawkins, Mrs. C. P.
*Hayes, Mrs. C. F., 1609 Harrington.
*Hewatt, Mrs. J. W.
Hiett, Mrs. Carey, 1424 Virginia.
*Higgins, Mrs. W. P., 3206 Sandra.
Hightower, Mrs. L. P., 800 Virginia Pl.
*Hook, Mrs. J. H., 3908 Lenox.
Horn, Mrs. W. S., 2217 Winton Ter.
Howard, Mrs. E. L., Rt. 1, Box 329, Birdville Rd.
Howard, Mrs. Rex, 3125 Wabash.
Huffman, Mrs. A. M., 3029 Lipscomb.
*Hulsey, Mrs. Sim.
Hyde, Mrs. X. R., Riverlake Dr.
*Horn, Mrs. J. M.
*Isaacks, Mrs. Hub.
Jackson, Mrs. A. E., Rt. 7, Box 210.
Jackson, Mrs. H. T., 416 Crestwood Dr.
Jagoda, Mrs. Samuel, 2512 Fifth Ave.
Jenkins, Mrs. W. N., 2512 Greene.
Kibbie, Mrs. Horace K., 2417 Medford Ct. East.
Kibbie, Mrs. Kent V., 715 West Leuda.
Kingsbury, Mrs. H. B., 2041 Windsor Pl.
Kramer, Mrs. J. T., 3016 Marigold.
*Lace, Mrs. Ted.
*Lacy, Mrs. G. W., 3200 Mt. Vernon.
Lackey, Mrs. W. C., 2300 Medford Ct. E.
Ladd, Mrs. A. D., 1109 S. Henderson.
Lange, Mrs. A. A., 2600 Ryan Place Dr.
Lauderdale, Mrs. T. L., 2212 Hawthorne.
Lawson, Mrs. J. M., 3724 Bellaire Dr. N.
Leon, Mrs. W. R., 2200 College Ave.
*Levy, Mrs. Lewis, 129 Williamsburg Lane.
Littlepage, Mrs. H. B., 814 W. Terrell.
Lorimer, Mrs. W. S., 2240 Winton Ter. W.
Lyle, Mrs. J. M., 2421 Stadium Drive.
Matheson, Mrs. D. N., 2500 Cockrell.
McCarroll, Mrs. M. C., 3724 Linden.
*McCollum, Mrs. C. H., Jr.
McKean, Mrs. R. W., Oakhill Farm.

[1]Address is Waco unless otherwise stated.
[2]Address is Clifton unless otherwise stated.
[3]Address is Fort Worth unless otherwise stated.
*Members on leave.

*McKenzie, Mrs. W. H.
McKee, Mrs. Frank, 2300 Avalon Court.
McVeigh, Mrs. J. F., 4800 Crestline Rd.
*Mitchell, Mrs. Gatlin.
*Morris, Mrs. A. J.
Mulkey, Mrs. Y. J., 2309 Harrison.
Munter, Mrs. Craig, 3811 Potomac.
Murchison, Mrs. S. J. R., 3205 Stadium Dr.
O'Bannon, Mrs. R. P., 2135 Warner Rd.
Ott, Mrs. W. O., 1019 West Terrell.
Phillips, Mrs. W. G., 3115 Race St.
Price, Mrs. S. A., 957 E. Mulkey.
Pumphrey, Mrs. A. B., White Settlement Road.
Rathgeber, Mrs. V. D., 2320 Mistletoe Blvd.
Renshaw, Mrs. H. S., 2913 Alton Rd.
Richardson, Mrs. J. J., 2404 Medford Ct. E.
Roberts, Mrs. A. L., 1818 Eighth Ave.
Rumph, Mrs. D. M., 1521 Grand.
Rumph, Mrs. Mal., 1940 Forest Pk Blvd.
Rumph, Mrs. T. G., 2101 Pembroke Dr.
Schenck, Mrs. C. P., 3117 Stadium Dr.
Schoolfield, Mrs. E. G., 1501 W. Myrtle.
Schoonover, Mrs. F. S., 600 Eighth Ave.
Scroggie, Mrs. V. D., 3736 Country Club Circle.
Schwartz, Mrs. E. G., 2420 Shirley.
Sewell, Mrs. Robert, 6105 Locke.
Shaw, Mrs. E. L., 1908 Ashland.
Sheddan, Mrs. F. G., 1313 Sinclair Bldg.
Shelley, Mrs. H. J., 4071 Modlin.
*Shilling, Mrs. H. C.
*Siddons, Mrs. G. Y.
Snyder, Mrs. F. L., 304 Virginia Place.
Spivey, Mrs. J. L., 2339 W. Magnolia.
*Steger, Mrs. J. H.
Stout, Mrs. Sidney, 3632 Bellaire Dr. N.
*Stow, Mrs. R. C.
*Sumner, Mrs. W. W.
Swift, Mrs. W. B., 3743 Westcliff Road S.
Tatum, Mrs. W. C., 1828 Hillcrest.
Taylor, Mrs. Holman, 2025 Huntington Lane.
Terrell, Mrs. C. E., 2618 Waits.
Terrell, Mrs. C. O., 2621 Waits.
*Terrell, Mrs. C. O., Jr.
Terrell, Mrs. T. C., 2401 Stadium Dr.
Thomas, Mrs. H. C., 1301 Clover Lane.
Thomason, Mrs. T. H., 4451 Crestline Rd.
Thompson, Mrs. W. R., 2306 Sixth Ave.
Tom, Mrs. J. C., 1503 W. Myrtle.
Tottenham, Mrs. J. W., 1204 North Riverside Dr.
*Tottenham, Mrs. J. W., Jr.
Touzel, Mrs. C. S. E., 1326 Summit.
Trigg, Mrs. H. B., 4624 Harley.
Trigg, Mrs. Ross, 500 First Natl. Bk Bldg.
Van Zandt, Mrs. I. L., 3815 Lenox.
Walker, Mrs. Webb, 2420 College.
Webb, Mrs. W. S., 1209 Thomas Pl.
*West, Mrs. W. B., 2405 Lofton Terrace.
Wier, Mrs. E. M., 3718 Country Club Cir.
Wiggins, Mrs. John Jr., 209 Williamsburg Lane.
Wise, Mrs. J. R., 3008 Greene.
Withers, Mrs. I. A., 1205 Eighth Ave.
Woodward, Mrs. C. S., Arlington.
*Wooten, Mrs. J. H.
*Worden, Mrs. R. W.
Daly, Mrs. T. J., 4024 Dexter.
Robertson, Mrs. J. A., 3004 Ryan Ave.

TAYLOR-JONES COUNTIES AUXILIARY†

*Adamson, Mrs. W. B., 2341 S. 10th St.
Alexander, Mrs. J. M., 602 Victoria.
Bass, Mrs. T. B., 1717 Holbron.
*Bailey, Mrs. S. W., 1318 Vine.
Barnett, Mrs. W. H., 3498 Ward.
Bridges, Mrs. J. P., 1350 Meander.
Cash, Mrs. W. A. V., 901 Albany.
Crow, Mrs. Jack A., 1809 S. 14th.
Daly, Mrs. J. M., 1026 Marshall.
Estes, Mrs. J. M., 1934 Hickory.
Grubbs, Mrs. L. F., 623 Amarillo.
*Gray, Mrs. George A., 3142 S. 7th.
*Gibson, Mrs. J. P., 1526 N. 19th.
Hedrick, Mrs. T. Wade, 1310 Sylvan Dr.
*Hodges, Mrs. Frank C., 102 Oldham.
Hollis, Mrs. Lonnie W., 1865 N. 7th.
Hollis, Mrs. Scott W., 1202 Sayles.
Johnson, Mrs. L. F., 1399 Austin.
Kirkpatrick, Mrs. R. B., 918 Palm.
Latham, Mrs. J. B., 1925 N. 5th.
Leggett, Mrs. C. B., San Angelo Hwy.
Little, Mrs. O. W., 1330 N. 2nd.
Mathews, Mrs. W. J., 1326 Highland.
*Middleton, Mrs. Edwin E., 942 Elmwood.
Middleton, Mrs. E. R., 842 Sayles.
*McDonald, Mrs. Donald, 1251 Elmwood.
*McFadden, Mrs. C. A., 1730 S. 12th.
Pickard, Mrs. L. J., 1326 Meander.
Pritchard, Mrs. C. L., 2042 S. 8th.
Ramsey, Mrs. Wayne V., 1682 Hickory.
Sadler, Mrs. William T., Merkel.
*Seale, Mrs. Hubert, 735 Sayles.
Sellers, Mrs. Erle D., 1301 Elmwood.
Shytles, Mrs. Grady, 941 Ross.
Snow, Mrs. William R., 702 Sayles.
Tull, Mrs. Raymond H., 1658 N. 21st.
Thurman, Mrs. Geo. D., 1141 N. 21st.
*Whiting, Mrs. Edward T., South East.

†Address is Abilene unless otherwise stated.
*Members on leave.

WICHITA COUNTY AUXILIARY[1]

Adams, Mrs. W. B., 2024 Berkely.
Atkinson, Mrs. Curtis, 1302 Polk.
Casky, Mrs. M. H., 2410 Speedway.
Collard, Mrs. F. R., 2414 9th.
Crump, Mrs. W. E., 1673 Dayton.
Collins, Mrs. Paul, 2914 9th.
Daily, Mrs. R. L., 1819 Wilson.
Dorbandt, Mrs. W. B., 2201 Avondale.
Egdorf, Mrs. O. C., 1605 13th.
Glover, Mrs. Milton H., 1712 11th.
Guest, Mrs. J. C. A., 1801 11th.
Hall, Mrs. J. D., 1723 Elizabeth.
Hargrave, Mrs. R. L., 1824 Huff.
Harper, Mrs. John W., State Hospital.
Harrison, Mrs. Grace, 3206 Peckham.
Hartsook, Mrs. Chas. R., 2715 9th.
Heymann, Mrs. J. A., 3113 Milby.
Holland, Mrs. Lewis B., 1655 Pearl.
Howser, Mrs. J. P., State Hospital.
Johnson, Mrs. J. A., 1711 Victory.
Kanatzer, Mrs. J. E., 2103 Miramar.
Kiel, Mrs. O. B., 2104 Miramar.
Kimbrough, Mrs. O. T., 1920 Victory.
Knox, Mrs. Roland, William-Mary Hotel.
Leach, Mrs. A. I., 1503 Hayes.
Ledford, Mrs. H. P., 3218 Beach.
Ledbetter, Mrs. Harry, 1905 Victory.
Lee, Mrs. Q. B., 1718 Huff.
Little, Mrs. J. A., 2107 Berkley.
Lowry, Mrs. W. P., 300 Morningside.
Lynch, Mrs. T. C., Lincoln Rd., No. 5.
Manar, Mrs. R. W., 1820 Wilson.
Mangum, Mrs. Carl E., 2901 Taft.
Monroe, Mrs. C. W., Electra.
Nail, Mrs. J. B., 2023 Berkley.
Nelson, Mrs. R. L., 2204 Avondale.
Patillo, Mrs. A. D., 1659 Victory.
Parnell, Mrs. L. D., 1508 Tildon.
Pritchard, Mrs. H. D., 3715 Kessler.
Russell, Mrs. L. C., Burkburnett.
Rundell, Mrs. W. K., 1815 Collins.
Seay, Mrs. Joe, Iowa Park Rd.
Singleton, Mrs. George, 2207 Avondale.
Smith, Mrs. P. K., 2110 Wenonah.
Smith, Mrs. Zenas M.
Sullivan, Mrs. H. C., Burkburnett.
Scarlett, Mrs., 1311 Taylor.
Whiting, Mrs. W. B., 2175 Ave. I.
Wilson, Mrs. O. W., 1006 Brook.

FOURTEENTH OR NORTHERN DISTRICT

Mr. O. W. Robinson
Paris
Council Woman

COOKE COUNTY AUXILIARY[2]

Atchinson, Mrs. James W., 515 Lindsey.
Mead, Mrs. E. C., 724 S. Morris.
Myrick, Mrs. I. S., Muenster.
Thayer, Mrs. C. B., 1014 S. Denton.
Thomas, Mrs. I. L., 628 Lindsey.
Whiddon, Mrs. R. C., 1112 Lindsey.
Yarbrough, Mrs. S. M., 312 S. Grand.

DALLAS COUNTY AUXILIARY[3]

Addison, Mrs. R. P., 5429 Gaston.
*Alessandra, Mrs. S. A.
Alexander, Mrs. Jo C., Stoneleigh Ct.
Alexander, Mrs. Lee J., 2819 Welborn.
*Allday, Mrs. L. E., 4224 Stanhope.
Allen, Mrs. Burton W., 5647 Ridgedale.
*Allison, Mrs. Wilfred J., 6948 Lakeshore Drive.
Altman, Mrs. William A., 1538 Oak Knoll.
Andrew, Mrs. Warren, 4211 Swiss Ave.
Arnold, Mrs. L. E., 3644 Greenbrier.
Aronson, Mrs. Hattie, Maple Terrace.
Ashby, Mrs. John E., 3429 Cornell.

[1]Address is Wichita Falls unless otherwise stated.
[2]Address is Gainesville unless otherwise stated.
[3]Address is Dallas unless otherwise stated.
*Members on leave.

*Aten, Mrs. Eugene L.
*Ault, Mrs. C. A., Jr.
*Bagwell, Mrs. John S., 3236 Purdue.
Austin, Mrs. Frank H., 4504 Arcady.
Baird, Mrs. Sidney S., 3549 Southwestern.
Baldwein, Mrs. Alvin, Jr., 4502 University.
Barnes, Mrs. Dorsey K., 5419 Farquhar La.
Barr, Mrs. Tom, 4683 Belclaire.
*Barta, Mrs. C. K.
Barton, Mrs. Robert M., 4513 Beverly Dr.
Beall, Mrs. John R., 3304 Beverly Dr.
*Beavers, Mrs. N. B., 4329 Fairfax.
Beckering, Mrs. H. H., 4693 Fairfax.
Bell, Mrs. Marvin D., 3647 Tremont.
Berger, Mrs. B. J., 3916 Stonebridge Dr.
Black, Mrs. J. H., 3624 Princeton.
Bland, Mrs. Leonard F., 4621 Munger.
Block, Mrs. Cecil, 2622 Park Row.
*Block, Mrs. Harold M.
Bourland, Mrs. J. W., Jr., 4438 Arcady.
Bourland, Mrs. John B., 3409 Beverly Dr.
Bradford, Mrs. William H., 4679 Westside Drive.
Brannin, Mrs. Dan, 4103 Averill Way.
Brannin, Mrs. Edward B., 7710 South Has-
Brown, Mrs. C. Frank, 4401 Edlen.
*Brown, Mrs. S. Roland.
kell.
*Brau, Mrs. J. Gilmore.
Brereton, Mrs. G. E., 5847 Velasco.
Brooks, Mrs. E. J., 1205 North Edgefield.
Browne, Mrs. W. C., 705 North Marsalis.
Brooksaler, Mrs. Fred, 4332 Grassmere La.
Bruton, Mrs. Emmett B., 5218 Vickery Blvd.
Buchanan, Mrs. J. Forest, 4001 Druid La.
Bumpass, Mrs. S. R., 6918 Vivian.
*Burgess, Mrs. George A.
*Bush, Mrs. Douglas Moore, 3625 Hanover.
*Butte, Mrs. Felix L., 3700 Maplewood.
Bywater, Mrs. T. W., Falls Road.
Caillet, Mrs. O. Rene, 5002 W. Lovers La.
*Cairns, Mrs. Buel.
Calhoun, Dr. Nina Fay, Maple Terrace.
*Carlson, Mrs. G. D.
Carman, Mrs. H. Frank, 6228 Preston Rd.
Carrell, Mrs. Brandon, 4429 Belclaire.
Carrell, Mrs. W. B., 2317 Welborn.
*Carswell, Mrs. W. E., 6722 Lakeshore Dr.
*Carter, Mrs. C. B., 4500 Normandy.
Carter, Mrs. Charles F., 4519 Rheims Pl.
Carter, Mrs. Earl L., 6660 Lakeshore Dr.
Cary, Mrs. Edward H., 4712 Lakeside Dr.
Chapman, Mrs. John S., 3828 Purdue.
*Cheavens, Mrs. Tom H., 708 N. Glasgow Drive.
Cinnamon, Mrs. Alfred M., 6938 Casa Loma.
Clark, Mrs. Harold G., 4742 Mockingbird Lane.
Coble, Mrs. J. M., 2504 Maple.
Cochran, Mrs. H. Walton, 3308 St. John's Drive.
*Cochran, Mrs. Leroy M., Veterans' Hospital.
*Collier, Mrs. Gates, 2219 North Fitzhugh.
*Cookerly, Mrs. Van, 4412 Lorraine.
Copeland, Mrs. F. R., 3506 Springbrook.
Cowart, Mrs. Robert W., 4313 Worth.
Cox, Mrs. Eli R., 5744 Gaston.
Crutcher, Mrs. Howard K., 1606 Junior Dr.
Daniel, Mrs. Robert H., 3313 Dartmouth.
Daniel, Dr. Ruby K., 4212 Loma Alto.
*Dathe, Mrs. Richard.
Davidson, Mrs. G. A., 1025 Cordova.
Davis, Mrs. David B., 1832 South Blvd.
Dawson, Mrs. J. L., 9825 Northwest Hwy.
Dean, Mrs. John H., 5001 Northwest Hwy.
Deatherage, Mrs. William, 4517 Reiger.
*Deatherage, Mrs. W. R.
Decherd, Mrs. Henry B., 3713 Hall.
*Denton, Mrs. Guy T., Jr., 2519 Marvin.
D'Errico, Mrs. Albert, 4907 Shadywood La.
*Devereux, Mrs. W. P., 3808 Miramar.
Dickey, Mrs. E. V., 3508 Harvard.
Donald, Mrs. Homer, 1545 West Colorado Blvd.
Dorman, Mrs. J. H., 3636 Lovers Lane.
*Dozier, Mrs. Fred, 4225 Bryn Mawr.
Duckett, Mrs. J. W., 3529 Caruth Blvd.
Dunlap, Mrs. Elbert, 3712 Lemmon.
Dunlap, Mrs. John, 4527 Fairway.
*Dunstan, Mrs. E. M.
Edwards, Mrs. William L., 2014 Euclid.
Embree, Mrs. John W., 4218 Fairfax.
Evans, Mrs. Edward L., 906 Cedar Hill.
Evans, Mrs. W. G., 4065 Purdue.
Fowler, Mrs. W. W., 4530 Munger.
*Fox, Mrs. Everett C., 4224 Loma Alto.
Franklin, Mrs. Floyd S., 4675 Edmondson.
Franklow, Mrs. C. D., Adolphus Hotel.
Freedman, Mrs. S. M., Maple Terrace.

Fry, Mrs. Murdock D., 6445 Lakewood Blvd.
*Galt, Mrs. Sidney, 4148 Newton.
Gauldin, Mrs. Robert J., 6118 Llano.
Gessner, Mrs. F. E., 7235 Lakewood Blvd.
Gibbons, Mrs. O. W., 4329 Lorraine.
Giles, Mrs. Robert B., 3900 Potomac.
Gill, Mrs. A. J., 6870 Lorna Lane.
*Gill, Mrs. Horace E., 1106 Galloway.
Goff, Mrs. G. F., 3817 Maplewood.
Goforth, Mrs. J. L., 6907 Westlake.
Goode, Mrs. John V., 4376 Potomac.
Gordon, Mrs. E. S., 511 Brookside.
Green, Mrs. Tim, 1217 N. Tyler.
Greer, Mrs. B. E., 206 West 10th St.
Griffin, Mrs. B. H., Frost.
*Grow, Mrs. Max H.
Guerriero, Mrs. William F., 3933 Stonebridge Dr.
Hacker, Mrs. Guy L., 3600 Colgate.
Hackler, Mrs. G. M., 3938 University Blvd.
Hackney, Mrs. U. P., 5703 Vanderbilt.
Hale, Dr. Martha Helen, 4554 Arcady.
Haley, Mrs. W. E., 4720 St. Johns Dr.
Hampton, Mrs. J. A., 4433 S. Versailles.
Hannah, Mrs. Calvin R., 3921 Potomac.
Harder, Mrs. Ira E., 4931 Park Lane.
Harrington, Mrs. F. T., Samuell Blvd., P. O. Box 1769.
Harrington, Mrs. S. F., 3722 Cragmont.
*Harris, Mrs. N. J., 4321 Westway.
Harrison, Mrs. Ben F., 3115 Amherst.
Harrison, Mrs. Gaston, 4308 Arcady.
Harrison, Mrs. Tinsley R., 3635 Beverly Dr.
Harvill, Mrs. T. Haynes.
Hawkins, Mrs. Hubert F., 2100 W. Kessler Pkwy.
Hawley, Mrs. J. Leeper, 4429 Amherst.
*Henry, Mrs. D. J., 6447 Kenwood.
*Herndon, Mrs. James.
Hill, Mrs. J. M., 6752 Avalon.
Hill, Mrs. S. M., 4617 Lexington.
*Hilliard, Mrs. George M.
Hodges, Mrs. J. Shirley, 3516 University Blvd.
Hodges, Mrs. Leon, Hampton Road.
Hopkins, Dr. May Agnes, 4517 Highland Drive.
Howard, Mrs. George W., 628 Haynes.
Howard, Mrs. William E., 6616 Gaston.
Howell, Mrs. J. B., 4727 Odes Manor Place.
Hudson, Mrs. Lee, 4312 Overhill Dr.
Jackson, Mrs. Reuben W., 4200 DeLoache Ave.
Jackson, Mrs. Rice R., 5639 Gaston.
Jenkins, Mrs. John L., Route 7, Forest Lane.
Jenkins, Mrs. Speight, 9101 Preston Rd.
Jones, Mrs. Everett, Stoneleigh Hotel.
Jones, Mrs. J. Guy, 6875 Tokalon Dr.
Jones, Mrs. W. D., 5808 Gaston.
Kerr, Mrs. Jack G., 3513 Milton.
Kilgore, Mrs. Donald G., 3318 Dartmouth.
Kindley, Mrs. George C., 5211 Live Dak.
*King, Mrs. Karl B.
Kirksey, Mrs. Tom M., 4521 N. Versailles.
*Knickerbocker, Mrs. Bruce A., 3430 Rankin.
Knowles, Mrs. W. Mood, 6636 Avalon.
Knox, Mrs. Robert, 4348 Livingston.
Kreymer, Mrs. George, 1016 N. Peak.
Laugenour, Mrs. D. P., 4549 Arcady.
Launey, Mrs. George V., 4627 Fairfax.
*Lee, Mrs. Ridings E.
*Leeper, Mrs. Edward P.
Lehmann, Mrs. John R., 3921 Potomac.
Levin, Mrs. Paul M., 6318 Westchester Dr.
Levy, Mrs. H. R., 4019 Druid Lane.
*Littell, Mrs. George S.
*Lively, Mrs. W. M., Jr.
*Loftis, Mrs. Earl L.
Long, Mrs. G. D., 2904 Yale.
Looney, Mrs. W. W., 2223 Barberry.
Lott, Mrs. Mark E., 6214 Gaston.
Love, Mrs. Thos. Stafford, Midway and North Shore Rd.
Maddox, Mrs. W. Gordon, 4428 Windsor Parkway.
Mahon, Mrs. G. D., 8608 Inwood Road.
Marchman, Mrs. O. M., 5328 Live Oak.
Marshall, Mrs. J. H., 6241 La Vista Dr.
Martin, Mrs. Charles L., Route 6, Box 543, Irving.
Martin, Mrs. W. E., 7129 Vivian.
*Mason, Mrs. Porter K., 3910 Bryn Mawr.
Massey, Mrs. Warren E., 3304 Stanford.
Mathews, Mrs. Paul W., 4327 W. Potomac.
Maxfield, Mrs. J. R., Jr., 4304 Versailles.
Maxfield, Mrs. J. R., 3601 Milton.
Mazer, Mrs. M. L., 4718 Live Oak.
McBride, Mrs. Dayton G., 3629 Beverly Dr.
McBride, Mrs. R. B., 6700 Turtle Creek Blvd.
McCracken, Mrs. Joseph H., Jr., 4401 Highland Dr.
McFarland, Mrs. Gordon B., 8728 Inwood Road.
McIver, Mrs. Julius, 3224 Southwestern.
*McLaurin, Mrs. Hugh L. Jr., 4801 Seneca Drive.
McLaurin, Mrs. John G., 4710 Munger.
McLeod, Mrs. J. N., 6722 Lakewood.
Mendenhall, Mrs. Elliot, 4221 Belclaire.
Mengert, Mrs. William F., 4505 Southern.
Metz, Mrs. M. Hill. 6811 Hunter Galen Rd.
*Miller, Mrs. Tate.
Milliken, Mrs. S. E., 3925 Maple.
Milliken, Mrs. S. Ramsey, 4918 Swiss.
*Mills, Mrs. James T.
*Minnett, Mrs. John S.
Montgomery, Mrs. Henry G., 3116 University Blvd.
Moody, Mrs. Joe V., 1534 Junior Dr.
Moore, Mrs. H. Leslie, 4204 Beverly Dr.
Moore, Mrs. Ramsay H., 4700 Neola Dr.
*Moore, Mrs. Robert L., 4702 Shadywood La.
*Morris, Mrs. A. Truett, 1430 San Rafael Drive.
Murchison, Mrs. D. R., 4100 Hawthorne.
Nash, Mrs. C. C., 1217 Lausanne.
Neuman, Mrs. Albert, 4319 Oak Lawn.
Newsom, Mrs. Asa A., 5906 McCommas.
Newton, Dr. Cosette Faust, 4005 Miramar.
O'Brien, Mrs. H. A., 4331 Avondale.
O'Brien, Mrs. J. Dennis, 4347 Avondale.
Pace, Mrs. John M., 4849 Montrose.
*Park, Mrs. B. E.
*Parks, Mrs. Harold.
Paternostro, Mrs. Charles J., 4432 Mockingbird Pkwy.
*Patterson, Mrs. Casey E.
Patterson, Mrs. Cecil O., 3537 Southwestern.
Pence, Mrs. C. P., 5423 Gaston.
Perkins, Mrs. Jack F., 3526 Cedar Springs.
*Peyton, Mrs. J. B.
Pickett, Mrs. Taylor T., Box 81, Garland.
Pierce, Mrs. Franklin A., 6120 Gaston.
Potts, Mrs. W. H., Jr., 4325 Glenwood.
*Powell, Mrs. Homer, 7003 Denton Drive.
Quinn, Mrs. Lester H., 4505 Edmondson.
Rattan, Mrs. Paul M., 4657 Mockingbird Lane.
*Reaves, Mrs. L. M., 4553 Bordeaux.
*Reddick, Mrs. W. Grady.
Riddle, Mrs. Penn, 927 North Tyler.
Riley, Mrs. Joseph G., 3220 Princeton.
*Rippy, Mrs. Edwin L., 3622 Fairmount.
Rosenberg, Mrs. M. L., 5718 Anita.
Rosenthal, Mrs. Raoul S., Melrose Hotel.
*Ross, Mrs. Edward S.
Rouse, Mrs. Mildord O., 7626 Gaston.
Rubenstein, Mrs. Bernard, 516 Largent.
*Rucker, Mrs. J. C., 3452 Amherst.
Rumpf, Mrs. William H., 3517 Milton.
Sams, Mrs. Lewis C., 834 Salmon Dr.
*Scales, Mrs. John G.
Schaefer, Mrs. J. G., 2720 Purdue.
*Schenewerk, Mrs. George A.
Schmaltz, Mrs. W. F., 5442 Richmond.
Schoch, Mrs. Arthur G., 4109 Averill Way.
Schoolfield, Mrs. Ben. L., 5025 Junius.
Schuett, Mrs. Albert J., 5822 Mercedes.
Seay, Mrs. Dero E., 3421 Beverly Dr.
*Sebastian, Mrs. F. J.
Seeds, Mrs. Asa E., 4332 Stanhope.
Seely, Mrs. M. Stuart, 3911 Gaston.
Selecman, Mrs. Frank, 3609 Rosedale.
Sellers, Mrs. Lyle M., 3412 Southwestern.
Shane, Mrs. J. Howard, 4663 Fairfax.
Shannon, Mrs. Hall, 4230 Fairfax.
*Shaw, Mrs. Robert R., 4109 Amherst.
*Shelburne, Mrs. Samuel A.
Sheldon, Mrs. Lawrence B., 4531 Fairway.
Shelmire, Mrs. Bedford, 3813 Miramar.
Shepherd, Mrs. Walter F., 5819 Mercedes.
Shoecraft, Mrs. Warren A., 226 W. Oakenwald.
*Short, Mrs. Robert F., 3520 Dartmouth.
Shortal, Mrs. W. W., 7210 Lakewood Blvd.
Shuey, Mrs. Charles B., 4436 Southern.
Simpson, Mrs. Charles W., 3517 Beverly Dr.
Singleton, Mrs. J. Dudley, 3716 Amherst.
Slaughter, Mrs. Donald, 4518 Vandelia.
*Small, Mrs. Andrew B., 3617 Turtle Creek Blvd.
Smith, Mrs. DeWitt, 4126 Normandy.
Smith, Mrs. Edgar, 5650 Gaston.
*Smith, Mrs. Ralph C., 4000 Hawthorne.
Smith, Mrs. Richard M., 3659 Maplewood.
*Smith, Mrs. Tom E.
Sowers, Mrs. Harry B., 4618 San Jacinto.
Spangler, Mrs. Davis, 4404 Westway.
*Spence, Mrs. Harry M.
*Stephenson, Mrs. J. H., 4523 Cedar Springs.
Stephenson, Mrs. W. O., 4005 Hall.
Stone, Mrs. Marvin P., 4417 Southern.
Strother, Mrs. W. K., Jr., 6001 St. Andrews Drive.
*Stuart, Mrs. Samuel E.
Super, Mrs. A. R., 4030 Norway Rd.
*Talkington, Mrs. P. C.
Taylor, Mrs. H. Earl, 4218 McFarlin.
Terrell, Mrs. Alex W., 4304 Westway.
Terrill, Mrs. James J., 711 Dumont.
*Thomas, Mrs. Maxwell.
Thomas, Mrs. Paul J., 4130 Druid Lane.
Thomasson, Mrs. A. R., 4229 Arcady.
Thomasson, Mrs. A. R., Jr., 4229 Arcady.
*Thomasson, Mrs. Gus W., Jr., 3411 Prescott.
Thompson, Mrs. L. S., 3620 Princeton.
Thornton, Mrs. C. W., 337 Sunset.
Tittle, Mrs. Guy, 4201 Belclaire.
Tittle, Mrs. Lloyd C., 6633 Golf Drive.
Tomkies, Mrs. James S., 6911 Meadow Lake.
Touchstone, Mrs. Jay L., 4419 Edlen Dr.
*Trumbull, Mrs. R. A., Richardson.
Tubb, Mrs. Cullen L., 3525 Caruth Blvd.
Underwood, Mrs. George M., 3908 McFarlin.
Usry, Mrs. R. S., 1835 Garrett.
Van Duzen, Mrs. Rex E., 4601 DeLoache.
Walcott, Mrs. H. G., 5304 Key.
Walker, Mrs. Price M., 4408 Livingston.
Waldman, Mrs. Morris, 4034½ Hawthorne.
Wallace, Mrs. Gordon K., 1949 Old Orchard Dr.
Warren, Mrs. Charles H., 4803 Northwest Highway.
Webb, Mrs. Sam, Jr., 3712 Alice Circle.
Wells, Mrs. J. T., 4015 Colonial.
White, Mrs. C. Vincent, Route 7, Box 223.
White, Mrs. Edward, 4319 Arcady.
White, Mrs. William T., Stoneleigh Hotel.
Whitten, Mrs. Merritt B., 4335 Lorraine.
White, Mrs. William T., Stoneleigh Hotel.
Whitten, Mrs. Herritt B., 4335 Lorraine.
Wilkinson, Mrs. Albert, 1021 N. Montclair.
Wilkinson, Mrs Wallace B,, 705 W Colorado Blvd.
Williams, Mrs. Paul C., 3844 Turtle Creek Dr.
Williams, Mrs. T. S., 318 Beckleywood Blvd.
*Winans, Mrs. Henry M., 3825 Beverly Dr.
Winborn, Mrs. C. D., 5543 Ridgedale.
*Winn, Mrs. Robert E., 8730 Canyon Dr.
Winn, Mrs. Watt W., 3520 Hanover.
Witt, Mrs. Guy F., 6801 Hunters Glen Rd.
*Wolfe, Mrs. Joseph.
Woodard, Mrs. T. Leroy, 5711 Vanderbilt.
Woods, Mrs. Ozro T., 3501 Harvard.
*Wright, Mrs. Carlton C.
Wright, Mrs. R. E., 3801 Amherst.
Yancey, Mrs. R. S., 4629 Wenonah Dr.
Young, Mrs. John G., 3514 Rock Creek Dr.
*Zuelzer, Mrs. Wilhelm.

Deceased Members

Turner, Mrs. John S., 918 N. Marsalis, Dallas.

ELLIS COUNTY AUXILIARY†

Campbell, Mrs. W. E., Ennis.
Clark, Mrs. J. L., Ennis.
Clark, Mrs. J. P., Ennis.
Estes, Mrs. T. G.
Gough, Mrs. E. F.
Hastings, Mrs. M. E.
Jenkins, Mrs. J. B.
Jenkins, Mrs. F. H.
Jones, Mrs. J. E.
Story, Mrs. F. L., Ennis.
Sims, Mrs. W. P.
Sweatt, Mrs. O. P.

†Address is Waxahachie unless otherwise stated.

Thomas, Mrs. A. L., Ennis.
Tenery, Mrs. R. M.
Watson, Mrs. S. H.

GRAYSON COUNTY AUXILIARY[1]

Bates, Mrs. I. C., Route 5.
Blassingame, Mrs. Doak, 39 Vaughn Dr., Denison.
Brown, Mrs. H. L., 511 S Travis.
Carraway, Mrs. J. H., 1212 N. Wood.
Carter, Mrs. Wilbur, 1002 S. Crockett.
Enloe, Mrs. D. C., 1307 N. Hobson.
Etter, Mrs. E. F., 1112 N. Wood.
Fowler, Mrs. F. F., 1112 W Walker, Denison.
Freeman, Mrs. Don, 39 Vaughn Dr., Denison.
Gleckler, Mrs. Arthur, 1102 S. Crockett.
Greer, Mrs. G. W., Whitesboro.
Hailey, Mrs. E. L., 1200 W. Walker, Denison.
Henschen, Mrs. G. W., 926 S. Travis.
Jamison, Mrs. D. K., 910 W. Gandy, Denison.
Lee, Mrs. W. A., 1201 W. Morton, Denison.
Levin, Mrs. Z. O., 1430 W. Gandy, Denison.
May, Mrs. Ross, Whitewright.
Mayes, Mrs. J. A., 1301 W. Gandy, Denison.
McElhannon, Mrs. A. M., 1100 N. Wood.
Pierce, Mrs. Paul, 1400 W. Gandy, Denison.
Russell, Mrs. B. A., 826 W. Houston.
Shores, Mrs. Frank, Van Alstyne.
Stout, Mrs. H. I., 811 S. Crockett.
Strother, Mrs. C. D., 1418 Preston Dr.
Tuck, Mrs. V. L., 902 S. Travis.
Williams, Mrs. E. G., Collinsville.
Woodward, Mrs. Max, 1020 Leslie.

HOPKINS-FRANKLIN COUNTIES AUXILIARY[2]

Chapman, Mrs. B. F.
Connor, Mrs. W. E.
Hanna, Mrs. W. Ray
Johnson, Mrs. J. J.
Long, Mrs. W. W.
Long, Mrs. Frank.
Longino, Mrs. S. Byrd.
Lynch, Mrs. T. P.
McConnell, Mrs. T. H.
McGarity, Mrs. T. E.
Pratt, Mrs. R. E.
Southerland, Mrs. W. S.
Stirling, Mrs. Earl.
Stirling, Mrs. Earl H.
Worsham, Mrs. A. B.
Wood, Mrs. J. B.

HUNT-ROCKWALL-RAINS COUNTIES AUXILIARY[3]

Arnold, Mrs. B. F., 1804 Stonewall St.
Becton, Mrs. J. E., 1320 Park St.
Bush, Mrs. Leslie, Park St.
Bradford, Mrs. H. M., Mineral Heights.
Cantrell, Mrs. Will, 3414 Lee St.
Cooper, Mrs. J. S., 4104 Lee St.
Crim, Mrs. E. T., Park St.
Goode, Mrs. E. P., 3605 O'Neal St.
Hanchez, Mrs. J. M., 1803 Speedway.
Hayes, Mrs. E. A., 2827 Jones.
Kay, Mrs. Royal, 3810 Wesley.
Kennedy, Mrs. C. T., Sr., 2206 Park St.
Kennedy, Mrs. C. T., Jr., 2206 Park St.
King, Mrs. H. E., 4312 Wesley St.
Maier, Mrs. H. W., 3808 Pine St.
Morrow, Mrs. W. C., 2704 Polk St.
Pennington, Mrs. W. E., 3603 Wesley St.
Philips, Mrs. W. P., 2101 Park St.
Reeves, Mrs. W. B., 2309 Wesley.
Strickland, Mrs. T. C., Mineral Heights.
Swindell, Mrs. J. W., Ardis Heights.
Trentham, Mrs. J. C., Peniel.
Ward, Mrs. J. W., 1612 Park St.
Wilbanks, Mrs. M. L., 2905 Henry St.

KAUFMAN COUNTY AUXILIARY[1]

Alexander, Mrs. G. H., 203 N. Rockwall Ave.
Alexander, Mrs. W. F., 203 N. Rockwall Ave.
Cockrell, Mrs. C. C., Box 58.
Davis, Mrs. T. P., Johnston St.
Friddell, Mrs. D. T., W. Nash Ave.
Hall, Mrs. Ed, Kaufman.
Holton, Mrs. R. W., W. Brin Ave.
Jennings, Mrs. A. Y., Babank.
Johnston, Mrs. L. W., Lawrence Ave.
Lane, Mrs. E. D.
Powell, Mrs. G., Box 58.
Sloan, Mrs. R. C., Box 58.
Thomas, Mrs. Wm., Pecan St.

LAMAR COUNTY AUXILIARY[2]

Armstrong, Mrs. J. E., 854 S. Main.
Armstrong, Mrs. J. T., 854 S. Main.
Barker, Mrs. C. D., 1028 13th S. E.
Buford, Mrs. T. W., Minter.
Bowen, Mrs. Albert, 138 20th S. E.
Fitzpatrick, Mrs. W. W., 637 Clarksville.
Gilmore, Mrs. C. E., 229 6th N. E.
Goolsby, Mrs. Elbert, 547 Fitzhugh.
Hammond, Mrs. D. S., 1249 Lamar.
Hooks, Mrs. J. M., 660 Clarksville.
Hunt, Mrs. T. E., 528 Fitzhugh.
*Kerbow, Mrs. D. F.
Lewis, Mrs. R. L., 1210 Lamar.
McCuistion, Mrs. W. W., 1105 Clarksville.
O'Neill, Mrs. O. R., 546 Pine Bluff.
Robinson, Mrs. O. W., 1518 Lamar.
Stark, Mrs. E. H., 818 Pine Bluff.
*Stephens, Mrs. J. A., 718 6th S. E.
Stephens, Mrs. L. B., 1428 Clarksville.
Walker, Mrs. M. A., 914 South Main.
White, Mrs. H. H., Lamar Rd.

FIFTEENTH OR NORTHEASTERN DISTRICT

Mrs. R. C. Cross
Texarkana
Council Woman

BOWIE-MILLER COUNTIES AUXILIARY[1]

Baskett, Mrs. Roy, 1324 Hickory.
Collom, Mrs. S. A., 621 Main.
*Collom, Mrs. Allen, 3016 Pine.
Cross, Mrs. Ralph, 609 East 39th.
Frank, Mrs. C. H., 3403 Hazel.
Kitchens, Mrs. C. E., 3002 Pine.
Pickett, Mrs. Reavis, 1902 Laurel.
Rives, Mrs. J. H., 2720 Hazel.
Roberts, Mrs. A. W., 2823 Olive.
Robison, Mrs. J. T., 3019 Wood.
Tyson, Mrs. Joe E., 2803 Olive.
Watts, Mrs. E. M., 412 Texas.

HARRISON COUNTY AUXILIARY[2]

Baldwin, Mr. J. B., 2301 Port Caddo Rd.
Coke, Mrs. Rogers, 212 W. Grand.
Harris, Mrs. James H., 704 W. Burleson.
Hill, Mrs. John E., 804 W. Rusk.
Holcomb, Mrs. N. F., 1308 E. Fannin.
Littlejohn, Mrs. F. S., 400 Perry Dr.
Redding, Mrs. L. M., Pine Crest Dr.
Wyatt, Mrs. C. A., 1501 S. Washington.

MEMBERS-AT-LARGE, DISTRICT FIFTEEN[3]

Anders, Mrs. Ben, 708 Noel Dr.
Arvalt, Mrs. E. W., 700 Sylvan.
Bassett, Mrs. T. R., Mt. Pleasant.
Cole, Mrs. W. M., 101 W. Whaley Ave.
Cook, Mrs. Hardy, Noel Dr.
Ellis, Mrs. J. M., Mt. Pleasant.
Farrar, Mrs. W. P., Forest Hills.
Grissom, Mrs. T. S., Mt. Pleasant.
Gumbles, Mrs. Ernest, Atlanta.
Hardwick, Mrs. R. S., 212 E. Cotton.
Hibbitts, Mrs. Wm., 2526 Wood St., Texarkana.
Hurst, Mrs. W. R., Judson Rd.
Jinkins, Mrs. H. L. D., Hughes Springs.
Johnson, Mrs. R. L., Pittsburg.
Jones, Mrs. E. L., 704 E. Melton.
McKellar, Mrs. G. G., 26 Covington Dr.
McPherson, Mrs. D. B., 711 N. 1st St.
McRee, Mrs. J. T., 206 E. College St.
Nichols, Mrs. Joe D., Atlanta.
Niehuss, Mrs. H. H.
Reed, Mrs. Charles B., Clarksville.
Ross, Mrs. H. A., 130 Melton.
Rushing, Mrs. Garland S., Noel Dr.
Starnes, Mrs. A. E., Hughes Springs.
Von Sickle, Mrs. R. J., 404 E. Melton.
Watkins, Mrs. E. O., 225 Sidney.
Swinney, Mrs. B. A., 126 Houston.
Pickett, Mrs. Reavis, 1902 Laurel, Texarkana.
Barron, Mrs. John.

[1]Address is Sherman unless otherwise stated.
[2]Address is Sulphur Springs unless otherwise stated.
[3]Address is Greenville unless otherwise stated.

[1]Address is Terrell unless otherwise stated.
[2]Address is Paris unless otherwise stated.
*Members on leave.

[1]Address is Texarkana unless otherwise stated.
[2]Address is Marshall unless otherwise stated.
[3]Address is Longview unless otherwise stated.
*Members on leave.

MEMBERSHIP

STATE MEDICAL ASSOCIATION OF TEXAS

JUNE, 1945

No. 1. El Paso District, embracing the following counties: Brewster, Culberson, El Paso, Hudspeth, Jeff Davis, Loving, Pecos, Presidio, Reeves, Ward and Winkler.

No. 2. Big Spring District, embracing the following counties: Andrews, Borden, Dawson, Dickens, Ector, Fisher, Gaines, Garza, Glasscock, Howard, Kent, King, Lynn, Martin, Midland, Mitchell, Nolan, Scurry, Stonewall, Terry and Yoakum.

No. 3. Panhandle District, embracing the following counties: Armstrong, Bailey, Briscoe, Carson, Castro, Childress, Cochran, Cottle, Collingsworth, Crosby, Dallam, Deaf Smith, Donley, Floyd, Foard, Gray, Hale, Hall, Hansford, Hardeman, Hartley, Hemphill, Hockley, Hutchinson, Lamb, Lipscomb, Lubbock, Moore, Motley, Ochiltree, Oldham, Parmer, Potter, Randall, Roberts, Sherman, Swisher and Wheeler.

No. 4. San Angelo District, embracing the following counties: Brown, Coke, Coleman, Comanche, Concho, Crane, Crockett, Irion, Kimble, Mason, Menard, Mills, McCulloch, Reagan, Runnels, San Saba, Schleicher, Sterling, Sutton, Tom Green and Upton.

No. 5. San Antonio District, embracing the following counties: Atascosa, Bandera, Bexar, Comal, Dimmit, Edwards, Frio, Gillespie, Gonzales, Guadalupe, Karnes, Kendall, Kerr, Kinney, LaSalle, Maverick, Medina, Real, Terrell, Uvalde, Val Verde, Wilson and Zavala.

No. 6. Corpus Christi District, embracing the following counties: Aransas, Bee, Brooks, Cameron, Duval, Hidalgo, Jim Hogg, Jim Wells, Kenedy, Kleberg, Live Oak, McMullen, Nueces, Refugio, San Patricio, Starr, Webb, Willacy and Zapata.

No. 7. Austin District, embracing the following counties: Bastrop, Blanco, Burnet, Caldwell, Hays, Lampasas, Lee, Llano, Travis and Williamson.

No. 8. DeWitt District, embracing the following counties: Calhoun, Colorado, DeWitt, Fayette, Fort Bend, Goliad, Jackson, Lavaca, Matagorda, Victoria and Wharton.

No. 9. Southern District, embracing the following counties: Austin, Brazoria, Burleson, Galveston, Grimes, Harris, Madison, Montgomery, Polk, San Jacinto, Trinity, Waller, Walker and Washington.

No. 10. Southeastern District embracing the following counties: Angelina, Chambers, Hardin, Jasper, Jefferson, Liberty, Nacogdoches, Newton, Orange, Panola, Rusk, Sabine, San Augustine, Shelby and Tyler.

No. 11. Eastern District, embracing the following counties: Anderson, Cherokee, Freestone, Henderson, Houston, Leon and Smith.

No. 12. Central District, embracing the following counties: Bell, Bosque, Brazos, Coryell, Erath, Falls, Hamilton, Hill, Hood, Johnson, Limestone, McLennan, Milam, Navarro, Robertson and Somervell.

No. 13. Northwestern District, embracing the following counties: Archer, Baylor, Callahan, Clay, Eastland, Haskell, Jack, Jones, Knox, Montague, Palo Pinto, Parker, Shackelford, Stephens, Tarrant, Taylor, Throckmorton, Wichita, Wilbarger, Wise and Young.

No. 14. Northern District, embracing the following counties: Collin, Cooke, Dallas, Delta, Denton, Ellis, Fannin, Franklin, Grayson, Hopkins, Hunt, Kaufman, Lamar, Rains, Rockwell, Van Zandt and Wood.

No. 15. Northeastern District, embracing the following counties: Bowie, Camp, Cass, Gregg, Harrison, Marion, Morris, Red River, Titus and Upshur.

FIRST OR EL PASO DISTRICT

Dr. Joel Wright, Alpine, Councilor

EL PASO COUNTY MEDICAL SOCIETY

Alexander, M. L., Canutillo.
Alexander, Vance T., El Paso.
Arguelles, F. L., El Paso.
Armistead, E. K., El Paso.
Armistead, S. D., El Paso.
Awe, Chester D. (Mil.), El Paso.
Barrett, Frank O., El Paso.
Basom, Wm. C., (Mil.), El Paso.
Bellanger, Geo. L., Ysleta.
Bennett, J. T., El Paso.
Bernell, C. E., El Paso.
Black, Arthur P. (Mil.), El Paso.
Branch. W. M., El Paso.
Breck, Louis W. (Mil.), El Paso.
Britton, Bloyce H., (Mil.), El Paso.
Britton, W. W., El Paso.
Brown, Chas. P., El Paso.
Brunner, Geo., El Paso.
Butler, Arthur H., El Paso.
Cameron, David M. (Mil.), El Paso.
Carter, Joe C., El Paso.
Causey, E. Grady (Mil.), El Paso.
Cox, Lyman T. (Mil.), El Paso.
Curtis, W. R. (Mil.), El Paso.
Cummins, Erwin J., El Paso.
Davis, Wm. J., El Paso.
Deady, Howard P., El Paso.
Duckett, Walter F., El Paso.
Duncan, Ernest A., El Paso.
Dutton, Loraine O., El Paso.
Eck, A. J., El Paso.
Egbert, Orville G., El Paso.
Epstein, I. M. (Mil.), El Paso.
Espey, Hugh S. (Mil.), El Paso.
Evans, F. G. (Mil.), El Paso.
Gaddis, Leo R., El Paso.
Gaddy, S. J., El Paso.
Gallagher, Paul (Mil), El Paso.
Garrett, Henry D., El Paso.
Goldberger, J. H., El Paso.
Goodloe, Basil L. (Mil.), El Paso.
Goodwin, Francis C. (Mil.), El Paso.
Gorman, James J., El Paso.
Gray, John B., El Paso.
Green, J. Leighton (Mil.), El Paso.
Gregory, J. M., Anthony, N. M.
Hardy, John A., El Paso.
Hart, Maynard S. (Mil.), El Paso.
Hatfield, H. D. (Mil.), El Paso.
Hendricks, C. M., El Paso.
Holt, Russell, El Paso.
Homan, R. B., Jr., El Paso.
Homan, Ralph H. (Mil.), El Paso.
Hornedo, Manuel D., El Paso.
Hughes, Raymond P. (Mil.), El Paso.
Hunter, C. D. (Mil.), El Paso.
Irvin, Edgar H., El Paso.
Jamieson, W. R., El Paso.
Jenness, Burt F., El Paso.
Jordan, Gerald H. (Mil.), El Paso.
Jumper, C. E., El Paso.
Kearney, Wm. W. (Mil.), El Paso.
Keller, N. H., El Paso.
King, Sam R., (Pres.), El Paso.
Kitterman, P. G., El Paso.
Laws, James W., El Paso.
Leigh, Harry, El Paso.
Liddell, Thos. C., El Paso.
Long, Arthur D., El Paso.
Lombard, Julian, El Paso.
Marshall, Alex G., El Paso.
Martin, John D. (Sec'y), El Paso.
Mason, C. H., El Paso.
McCamant, T. J., El Paso.
McChesney, Paul E., El Paso.
McNeil, Irving, El Paso.
Miller, Felix P., El Paso.
Molloy, M. S., El Paso.
Morrison, John E., El Paso.
Multhauf, A. W. (Mil.), El Paso.
Murray, Mildred L., El Paso.
Newman, S. H., El Paso.
Pangman, W. John (Mil.), El Paso.
Peticolas, John D., El Paso.
Price, E. D., El Paso.
Prothro, W. B., El Paso.
Randel, Brown W., El Paso.
Rawlings, J. Mott (Mil.), El Paso.
Ravel, Vincent M. (Mil.), El Paso.
Reed, P. H., El Paso.
Rennick, Chas. F., El Paso.
Rheinheimer, E. W., El Paso.
Rigney, Paul, El Paso.
Robbins, Jacob B. (Mil.), El Paso.
Rodarte, Reuben D. (Mil.), El Paso.
Rogde, Jacob, El Paso.
Rogers, Earl B., El Paso.
Rogers, Hugh Earl, El Paso.
Rogers, Will P., El Paso.
Rogers, S. Perry, El Paso.
Schuster, Frank P., El Paso.
Schuster, Stephen A., El Paso.
Shannon, Hugh M., El Paso.
Shanley, T. J. B., El Paso.
Smith, Leslie M., El Paso.
Snidow, Francis A. (Mil.), El Paso.
Soto, Raul C., El Paso.
Spearman, M. P., El Paso.
Spier, Erich, El Paso.
Stephenson, M. L. (Mil.), El Paso.
Stevens, B. F., El Paso.
Stevenson, Walter H. (Mil.), El Paso.
Stowe, Jesson L., El Paso.
Swope, Samuel D., El Paso.
Thompson, Ernest B., El Paso.
Thompson, Robt. F., El Paso.
Treece, Angus A., Fabens.
Tucker, Geo. E., Anthony, N. M.
Turner, Geo., El Paso.
Turner, Steve F., El Paso.
Turner, S. T., El Paso.
Vance, James, El Paso.
Vandevere, W. E., El Paso.
Vargas, F. G., El Paso.
Varner, Harry H., El Paso.
Villareal, Andres, El Paso.
Villareal, Leopold (Mil.), El Paso.
Von Almen, S. G., El Paso.
Von Briesen Delphin (Mil.), El Paso.
Waite, Willis M. (Hon.), El Paso.
Walker, Newton F. (Mil.), El Paso.
Webb, Chas E., El Paso.
Weiss, E. J. (Mil.), El Paso.
Werley, Gottlieb, El Paso.
Wilcox, Leigh E., El Paso.

PECOS-JEFF DAVIS-PRESIDIO-BREWSTER COUNTIES MEDICAL SOCIETY

Barrett, Alfred E., Fort Stockton.
Barrett, M. E. (Mil.), Fort Stockton.
Craddock, Walter D., Fort Stockton.
Eaton, Calvin E., Fort Davis.
Gipson, J. F., Fort Stockton.
Hill, Malone V. (Mil.), Alpine.
Jeter, Drayton O., Alpine.
Kelley, W. N., Terlingua.
Lavanture, L. A. (Pres.), Marfa.
Lester, R. E., Sanderson.
Lockhart, W. E. (Mil.), Alpine.
Wright, Joel E. (Sec'y), Alpine.

(In.) indicates Intern membership.
(Hon.) indicates Honorary membership.
(Emer.) indicates Membership Emeritus.
(Mil.) indicates Military membership.

REEVES-WARD-WINKLER-LOVING-CULBERSON-HUDSPETH COUNTIES MEDICAL SOCIETY

Black, Wilmer D., Barstow.
Camp, Jim (Pres.), Pecos.
Cole, Charles M., Pecos.
Kunstadt, Paul, Monahans.
Lindley, Harold, Pecos.
McClure, Wayne H. (Mil.), Kermit.
Munk, Otto, Monahans.
Rehmeyer, Walter O., Monahans.
Roberts, Rufus A. (Sec'y), Pecos.
Robinson, Cecil A., Kermit.
Robinson, Lila Rose, Kermit.
Starr, Pete J., Kermit.
Wight, B. A. (Mil.), Kermit.
Wilson, Claude E., Wink.

SECOND OR BIG SPRING DISTRICT

Dr. A. H. Fortner, Sweetwater, Acting Councilor

DAWSON-LYNN-TERRY-GAINES-YOAKUM COUNTIES MEDICAL SOCIETY

Bennett, Jno. B. (Mil.), Lamesa.
Bradford, Andrew L., Seagraves.
Daniell, A. H. (Mil.), Brownfield.
Davis, Earl C., Brownfield.
Davis, Julian W. (Mil.), O'Donnell.
Frazier, Sam J., Lamesa.
Gerardy, Carl W. (Mil.), Seagraves.
Hill, Wayne C., Brownfield.
Jacobson, M. E. (Mil.), Amarillo.
Loveless, J. C., Lamesa.
Loveless, Robt. W. (Mil.), Lamesa.
Mitchell, H. C. (Mil.), Brownfield.
Price, Noble H., Lamesa.
Prohl, Emil H., Tahoka.
Richards, L. D., Seminole.
Sinclair, Jas. W. (Pres.), Tahoka.
Smith, Alfred H., Lamesa.
Stevenson, Edw. N. (Mil.), Seagraves.
Tomb, Andrew S. (Sec'y), Seminole.
Treadway, T. L., Brownfield.

ECTOR-MIDLAND-MARTIN-HOWARD-ANDREWS-GLASSCOCK COUNTIES MEDICAL SOCIETY

Absher, Lee A. (Mil.), Midland.
Barganier, John H., Odessa.
Bennett, Marion H., Big Spring.
Bobo, Thos. C. (Pres.), Midland.
Chapple, James H., Midland.
Cooper, Andrew J., Midland.
Cowper, Roscoe B. G., Big Spring.
Devereaux, Jas. M. (Mil.), Midland.
Dickerson, Melford S., Midland.
Fulcher, O. A., Odessa.
Golladay, Robt. M., Midland.
Hall, Granville T., Big Spring.
Hall, Jos. Leslie (Mil.), Stanton.
Headlee, Emmett V., Odessa.
Haley, James F. (Hon.), Midland.
Hestand, Haskell E. (Mil.), Odessa.
Hogan, John E., Big Spring.
Johnson, Homer B. (Mil.), Midland.
Leggett, Lloyd W. (Sec'y), Midland.
Lekisch, Kurt (Mil.), Midland.
Malone, Phocian W., Big Spring.
McMahan, Geo. T. (Mil.), Big Spring.
Miller, Garnett, Big Spring.
Ryan, W. E. (Mil.), Midland.
Sanders, J. V., Big Spring.
Sanders, Nell White, Big Spring.
Sanders, Preston R., Big Spring.
Shaw, Chester A., Big Spring.
Thomas, Clyde E., Jr. (Mil.), Big Spring.
Thomas, John B., Midland.
Weaver, Glenn S., Big Spring.
Whitehouse, Wm. G., Midland.
Wood, Geo. H., Big Spring.
Woodall, Jack M., Big Spring.

NOLAN-FISHER-MITCHELL COUNTIES MEDICAL SOCIETY

Barb, Thos. J., Roby.
Callan, Chester U., Rotan.
Crymes, J. Melvin, Colorado.
Dowling, Urlan J. (Mil.), Sweetwater.
Fortner, Amos H., Sweetwater.
Johnson, Bruce H. (Sec'y), Loraine.
Johnson, J. Frank, Rotan.
Loeb, Sam A. (Mil.), Sweetwater.
Logsdon, Harry A., Colorado.
Peavy, J. E. (Mil.), Sweetwater.
Peters, Roland O. (Mil.), Sweetwater.
P'Pool, Wm. F. (Mil.), Sweetwater.
Richardson, Jas. K. (Mil.), Sweetwater.
Rhodes, Oscar E. (Mil.), Colorado.
Rosebrough, Chas. A. (Pres.), Sweetwater.
Stubbs, James B. (Mil.), Sweetwater.
Young, James W., Roscoe.
Young, Tom D., Roscoe.

SCURRY-DICKENS-KENT-GARZA-BORDEN-KING-STONEWALL COUNTIES MEDICAL SOCIETY

Cockrell, Chas. Ray, Snyder.
Johnson, W. R., Snyder.
Rosser, H. E. (Sec'y), Snyder.

THIRD OR PANHANDLE DISTRICT

Dr. E. A. Rowley, Amarillo, Councilor

ARMSTRONG-DONLEY-CHILDRESS-COLLINGSWORTH-HALL COUNTIES MEDICAL SOCIETY

Cariker, Fred H., Childress.
Carroll, Wm. A., Claude.
Clark, R. Ernest, Memphis.
Fox, Grover C., Childress.
Garner, J. E., Turkey.
Goodall, O. R. (Pres.), Memphis.
Jenkins, B. L., Clarendon.
Jenkins, Oscar L., Dallas.
Jernigan, J. H., Childress.
Jeter, Perry R., Childress.
Jones, Chas. B. (Sec'y), Wellington.
Jones, Elmer K. (Mil.), Wellington.
Jones, Elmer W., Wellington.
Miller, Chas. H., San Antonio.
Moss. E. W., Pharr.
Odom, James A., Memphis.
Townsend, S. H., Childress.
Vardy, P. L., Estelline.
Wattam, James M., Wellington.
White, F. A., Childress.

DALLAM-HARTLEY-SHERMAN-MOORE COUNTIES MEDICAL SOCIETY

Brown, Thomas G., Dumas.
Cowin, Abraham W., Dalhart.
Moore, Victor R. (Pres.), Dalhart.
Reid, Frank I. (Sec'y), Dumas.

GRAY-WHEELER COUNTIES MEDICAL SOCIETY

Ashby, Chas. H., Pampa.
Batson, C. B., McLean.
Beach, Wm. Walter, El Paso.
Bellamy, R. M. (Mil.), Pampa.
Brown, Richard M., Pampa.
Christian, Paul C., Pampa.
Falkenstein, Richard D., Pampa.
Finley, H. Webb, McLean.
Gilliland, J. O. (Mil.), Pampa.
Gooch, Jas. O. (Mil.), Shamrock.
Gooch, James W., Shamrock.
High, Clifton E. (Pres.), Pampa.
Howze, Jo W. (Mil.), Pampa.
Johnson, J. B. (Mil.), Pampa.
Jones, W. Calvin, Pampa.
Kelley, Frank W. (Mil.), Pampa.
Kelly, John H., Pampa.
Nicholson, Harold E., Wheeler.
Nicholson, H. E., Jr. (Mil.), Wheeler.
Overton, M. C. (Mil.), Shamrock.
Pieratt, Karl W., Pampa.
Purviance, Walter, Pampa.
Shaddix, J. W. (Mil.), Shamrock.
Walker, Glenn R., Wheeler.
Webb, Roy A., Pampa.
Wilder, H. Lawler (Sec'y), Pampa.
Ziegler, Joel, Shamrock.
Ziegler, Paul (Mil.), Shamrock.

HALE-FLOYD-BRISCOE-SWISHER COUNTIES MEDICAL SOCIETY

Dye, Mary R., Plainview.
Dye, Everett L. (Mil.), Plainview.
Hansen, J. Harvey, Plainview.
Jones, Don P., Plainview.
Mitchell, Robt. H. (Mil.), Plainview.
Nichols, Everett O., Plainview.
Nichols, Everett O., Jr., Plainview.
Pitts, Donald H., Floydada.
Smith, Edwin W., Plainview.
Smith, Geo. V. (Pres.), Floydada.
Stewart, Evans P., Tulia.
Wayland, Levi C. (Sec'y), Plainview.

HANSFORD-HEMPHILL-LIPSCOMB-ROBERTS-OCHILTREE COUNTIES MEDICAL SOCIETY

Morris, Ernest (Pres.), Canadian.
Snyder, Edward H., Canadian.

HARDEMAN-COTTLE-FOARD-MOTLEY COUNTIES MEDICAL SOCIETY

Edmondson, Edward E., Hale Center.
Frizzell, Thos. D., Quannah.
George, Jos. M., Quannah.
Hill, Jesse M., Crowell.
Hughes, John F. (Sec'y), Spur.
McDaniel, Robt. R., Quannah.
Paris, P. J., Chillicothe.
Pate, Clarence C., Paducah.
Pate, Joe J. (Mil.), Paducah.
Stanley, James S., Matador.
Stover, J. E., Truscott.
Traweek, Albert C., Jr., Matador.
Traweek, Albert C., Sr., Matador.
Vestol, Earl A. (Pres.), Quannah.

HUTCHINSON-CARSON COUNTIES MEDICAL SOCIETY

Barksdale, Wm. C., Borger.
Bivings, Chas. K., Borger.
Brooks, Wm. W., Phillips.
Draper, Leonidas M. (Mil.), Borger.
Gibner, Geo. P., Spearman.
Hamra, Henry M., Phillips.
Hansen, Arthur F., Borger.
Hansen, Lawrence C. (Pres.), Borger.
Kimball, Melvin C., Borger.
Morris, Isaac C., Borger.
Petty, Lester E., Borger.
Stephens, Walton G., Borger.
Stephens, Milton M. (Sec'y), Borger.
Wallace, Henry G. (Mil.), Borger.

LAMB-BAILEY-HOCKLEY-COCHRAN COUNTIES MEDICAL SOCIETY

Coen, James R., Littlefield.
Dow, Harold D., Levelland.
Janes, Fred W., Jr., Littlefield.
Lusk, H. N., Levelland.
Patterson, Geo. T., Morton.
Payne, Clifford E. (Pres.), Littlefield.
Shotwell, I. T., Jr. (Sec'y), Littlefield.

LUBBOCK-CROSBY COUNTIES MEDICAL SOCIETY

Arnett, Sam C., Jr. (Mil.), Lubbock.
Barsh, Albert G., Lubbock.
Baugh, Wm. L., Lubbock.
Benshon, Martin H. (Mil.), Lubbock.
Blake, Emerson M., Lubbock.
Canon, Robert T., Lubbock.
Clark, Doyce M. (Mil.), Lubbock.
Cross, Denzil D., Lubbock.
Donaldson, J. D. (Mil.), Lubbock.
Douglas, R. C. (Mil.), Lubbock.
Dunn, Sam G., Lubbock.
Elkins, Clyde C. (Mil.), Lubbock.
English, Otis W., Lubbock.
Ewing, Mahon M., Lubbock.
Fiel, Charles A., Lubbock.
Girdner, Wm. H., Abernathy.
Hand, Orra R., Lubbock.
Haney, Edward L., Ralls.
Harris, Jos. R., Jr., Lubbock.
Hunt, Ewell L., Lubbock.
Hutchinson, Ben B. (Mil.), Lubbock.
Hutchinson, James T., Lubbock.
Jenkins, Byron A., Lubbock.
Key, Olan, Lubbock.
Krueger, Julius T., Lubbock.
Lattimore, James P., Lubbock.
Loveless, James E. (Mil.), Slaton.
Malone, Frank B., Lubbock.
Mansell, Christopher (Mil.), Lubbock.
Mast, Henrie E. (Mil.), Lubbock.
McCarty, Robert H., Lubbock.
McGuire, Scott T., Ralls.
McSween, Mangus J., Slaton.
Miller, Pauline A. (Sec'y), Lubbock.
Overton, Marvin C., Lubbock.
Payne, William E., Slaton.
Reeser, Wayne (Mil.), Lubbock.
Riddel, Roy L. (Mil.), Lubbock.
Rollo, James W., Lubbock.
Smith, Gerald S. (Mil.), Lubbock.
Spikes, Lowell W. (Mil.), Lubbock.
Standefer, Fred W., Lubbock.
Stewart, Allen T. (Pres.), Lubbock.
Stiles, James H., Lubbock.
Surman, Arnold C., Post.
Taylor, Otis, Jr. (Mil.), Lubbock.
Wagner, Charles J., Lubbock.
Watkins, Mina D. (Mil.), Lubbock.
Williams, David C., Post.
Wilson, James D. (Mil.), Lubbock.
Woods, Lemmie B., Lubbock.

POTTER COUNTY MEDICAL SOCIETY

Aronson, Samuel J. R., Amarillo.
Askew, Wm. L., Amarillo.
Black, R. P. (Mil.), Amarillo.
Blackwell, Ben T. (Mil.), Amarillo.
Broyles, Sam K., Amarillo.
Carroll, James Ralph (Mil.), Amarillo.
Cowgill, David M., Amarillo.
Crume, John James, Amarillo.
Crumley, Frederick J., Amarillo.
Cultra, Geo. M., Amarillo.
Churchill, Thomas P., Amarillo.
Dine, William C. (Mil.), Amarillo.
Duncan, Frank B. (Mil.), Amarillo.
Duncan, Robert A., Amarillo.
Flamm, Kenneth R. (Mil.), Amarillo.
Fuller, Martin L., Mineral Wells.
Gilkerson, Nan L., Amarillo.
Gist, Robert D., Amarillo.
Goldston, Alton B. (Mil.), Amarillo.
Gustin, James W. (Mil.), Amarillo.
Haugen, Ingvald J. (Mil.), Amarillo.
Hendrick, James W., Amarillo.
Jordaan, J. D., Amarillo.
Keys, Richard, Amarillo.
Klingensmith, Wm. R. (Pres.), Amarillo.
Knight, Melvin K. (Mil.), Amarillo.
Latson, Harvey H. (Mil.), Amarillo.
Lemmon, Jefferson R., Amarillo.
Loving, Dan H. (Mil.), Amarillo.
Lumpkin, Samuel H. (Mil.), Amarillo.
Marcley, David M. (Mil.), Amarillo.
Marsalis, Don S., Amarillo.
Murphy, Weldon O. (Mil.), Amarillo.
Owens, Guy, Amarillo.
Ozier, James B., Amarillo.
Patton, David M., Amarillo.
Patton, Louis K., Amarillo.
Payne, Ralph B. (Mil.), Amarillo.
Potter, Wilkes A., Amarillo.
Powers, Evelyn G., Amarillo.
Powers, Geo. L., Amarillo.
Prince, Norman C., Amarillo.
Puckett, Bascom M., Amarillo.
Puckett, Howard E. (Mil.), Amarillo.
Rasco, Isaac, Amarillo.
Reeves, Ernest E. (Mil.), Amarillo.
Roach, D. (Hon.), Amarillo.
Robberson, Jason H., Amarillo.
Rowley, Elmer A., Amarillo.
Royse, Geo. T. (Mil.), Amarillo.
Shudde, William J. (Mil.), Amarillo.
Smith, G. Ernestine, Amarillo.
Streit, August J., Amarillo.
Swindell, Raymond R., Amarillo.
Thomas, Wm. Borden, Jr., Amarillo.
Van Sweringen, Walter, Amarillo.
Vaughn, John H., Amarillo.
Vinyard, Geo. T., Amarillo.
Vineyard, Roy L., Amarillo.
Waddill, Geo. M., Jr. (Sec'y), Amarillo.
Wertz, Royal F. (Mil.), Amarillo.
Wheir, William H. (Mil.), Amarillo.
White, Jesse B., Amarillo.
Winsett, Amos Ewing, Amarillo.
Wrather, James R., Amarillo.

RANDALL-DEAF SMITH-PARMER-CASTRO-OLDHAM COUNTIES MEDICAL SOCIETY

Cogswell, R. E. (Sec'y), Dimmitt.
Donnell, Chas. E., Canyon.
Jarrett, Robt. P., Canyon.
Loyd, Oscar H., Vega.
Miller, Mayes (Pres.), Dimmitt.
Robison, Dutch K., Rocksprings.

FOURTH OR SAN ANGELO DISTRICT

Dr. R. E. Windham, San Angelo, Councilor

BROWN-COMANCHE-MILLS- SAN SABA COUNTIES MEDICAL SOCIETY

Allen, Homer B. (Sec'y), Brownwood.
Allen, Will L., Brownwood.
Bullard, Chester C., Brownwood.
Burns, Edward J., Bangs.
Cadenhead, Ernest F., Brownwood.
Campbell, James M., Goldthwaite.
Carrigan, Thomas A. (Mil.), Brownwood.
Farley, Frederick W. (Mil.), San Saba.
Felts, Richard C., San Saba.
Gray, Andrew J., Comanche.
Gray, Chas. W., Comanche.
Hallum, Roy G., Brownwood.
Horn, Jesse M., Brownwood.
Hughes, Sidney W. (Mil.), Brownwood.
Lobstein, Henry L. (Pres.), Brownwood.
Locker, Harry L., Brownwood.
Mayo, Oscar N. (Mil.), Brownwood.
McFarlane, Joe R., Brownwood.
Ory, Lee K. (Mil.), Comanche.
Pence, Winfield S., San Saba.
Pierce, Ethel Margaret, Brownwood.
Ritchey, Edward B., Brownwood.
Scott, David R., Brownwood.
Shelton, Ben M., Brownwood.
Stephen, James J., Robstown.
Walker, James B. N. (Mil.), Brownwood.

COLEMAN COUNTY MEDICAL SOCIETY

Aston, Samuel N., Coleman.
Bailey, Robert, Coleman.
Burke, Francis M., Coleman.
Cochran, Robt. H. (Pres.), Coleman.
Lovelady, Roy R. (Mil.), Santa Anna.
Moody, Chas. O. (Mil.), Coleman.
McDonald, Earl D., Santa Anna.
Nichols, John M., Coleman.
Weaver, Manly E. (Mil.), Coleman.
Young, Josephus G. (Sec'y), Coleman.

CRANE-UPTON-REAGAN COUNTIES MEDICAL SOCIETY

Bredehoft, J. C., Rankin.
Birdsong, Wm. F., Amherst.
Cooper, James L. (Pres.), McCamey.
Pattison, J. F., Big Lake.
Robinson, S. F. (Sec'y), Crane.

KIMBLE-MASON-MENARD-McCULLOCH COUNTIES MEDICAL SOCIETY

Alcorn, Robt. S., Menard.
Anderson, James P. (Mil.), Brady.
Anderson, James S., Brady.
Baze, P. A., Mason.
Granville, J. B., Brady.
Hays, Aaron R., Brady.
Hinchman, A. W., Brady.
Huff, Oscar, Mason.
Jordan, Dowell W. (Pres.), Brady.
Land, W. M., Lohn.
Leggett, J. A., Menard.
McCall, John G., Brady.
McCollum, Floyd L. (Mil.), Mason.
McCollum, G. G. (Mil.), Mason.
Moss, E. Bruce, Junction.
Ricks, Glenn H. (Sec'y), Brady.

RUNNELS COUNTY MEDICAL SOCIETY

Bailey, Chas. F. (Sec'y), Ballinger.
Barron, John L., Winters.
Chandler, Oren H., Ballinger.
Dixon, J. W. (Pres.), Winters.
Douglas, James G. (Hon.), Ballinger.
Hale, Frank M., Ballinger.
Halley, William B., Ballinger.
Jennings, T. V., Winters.
Lasater, O. R., Ballinger.
Macune, John W. (Dead), Ballinger.
Rives, G. T., Jr. (Mil.), Winters.
Shiller, J. J., Rowena.

TOM GREEN-COKE-CROCKETT-CONCHO-IRION-STERLING-SUTTON-SCHLEICHER COUNTIES MEDICAL SOCIETY

Anderson, Hiram M. (Mil.), San Angelo.
Anderson, Wilson D., San Angelo.
Arledge, Robert M. (Mil.), San Angelo.
Bernard, Richard C., Sanatorium.
Brown, Brian T. (Mil.), San Angelo.
Brown, Walter C., Sanatorium.
Bunyard, Joseph A., San Angelo.
Bush, William L. (Mil.), San Angelo.
Carbrey, Thos. F., San Angelo.
Cobb, Walton W., Fort Worth.
Cooper, Betty M. (In.), Sanatorium.
Doss, James M., Edinburg.
Everett, W. B. (Hon.), Fostoria.
Finks, Robert M., San Angelo.
Fowler, David D. (Hon.), Paint Rock.
Griffith, Jos. K., Robert Lee.
Helbing, Arlington, Barnhart.
Hess, David L., San Angelo.
Hickman, H. E., San Angelo.
Hixson, Jesse S., San Angelo.
Hixson, Wm. G., San Angelo.
Howell, John F., Sonora.
Hutchins, F. Leon, San Angelo.
Jones, J. Frank, San Angelo.
Keyes, Claude T. (Dead), San Angelo.
Kitchens, Walter L., Texarkana.
Kunath, Carl A. (Mil.), San Angelo.
Lewis, Aubrey L., San Angelo.
Mays, Chas. E. (Hon.), San Angelo.
McAnulty, James P., San Angelo.
McCullough, David, Kerrville.
McGee, Aubrey S. (Mil.), San Angelo.
McIntire, Floyd T., San Angelo.
McKnight, Joe B., Sanatorium.
Mee, Edmond L., San Angelo.
Mitchell, Wm. Grady (Sec'y), San Angelo.
Nesrsta, Geo. L., Ozona.
Nibling, Geo. W., San Angelo.
Oakes, Milton G. (Mil.), San Angelo.
Powers, Rufus L., San Angelo.
Rape, J. Marvin, San Angelo.
Reser, Wayne A., Wichita Falls.
Round, Kyle B., San Angelo.
Samuel, Hewell C., Texon.
Schulkey, Wm. E., San Angelo.
Schulze, Victor E., San Angelo.
Sessums, John R., San Angelo.
Sessums, John V. (Mil.), San Angelo.
Shelton, Joel (Mil.), Sonora.
Smith, Jerome H., San Angelo.
Strauss, Edward H., San Angelo.
Sutton, Dewey (Dead), San Angelo.
Swann, Wm. J. (Pres.), Sterling City.
Tandy, Hugh B. (Mil.), Ozona.
Tester, Lewis K. (Mil.), San Angelo.
Wall, D. D. (Mil.), San Angelo.
Wiig, Lawrence M., San Angelo.
Windham, Robert E., San Angelo.
Womack, Clifford T., San Angelo.
Woodward, Lewis O. (Mil.), San Angelo.
Yates, G. M. (Hon.), San Angelo.

FIFTH OR SAN ANTONIO DISTRICT

Dr. C. E. Scull, San Antonio, Councilor.

ATASCOSA COUNTY MEDICAL SOCIETY

Irwin, C. M., Charlotte.
Joyce, Walter H., Lytle.
Mann, Robert E. (Sec'y), Pleasanton.
Payne, John H., Jourdanton.
Shotts, C. C. (Mil.), Pleasanton.
Ward, Jeremiah, Jr., Poteet.
Ware, T. P. (Pres.), Poteet.
Youngblood, R. G., Pleasanton.

BEXAR COUNTY MEDICAL SOCIETY

Adelman, Jack A. (Mil.), San Antonio.
Aderhold, James P. (Mil.), San Antonio.
Alexander, C. B., San Antonio.
Allen, S. W., San Antonio.
Allin, Fred A., San Antonio.
Allin, Willis W. (Mil.), San Antonio.
Altgelt, Daniel D. (Mil.), San Antonio.
Anderson, James L., San Antonio.
Arendt, E. J., San Antonio.
Ashley, Richard W. (Mil.), San Antonio.
Atkinson, Donald T., San Antonio.
Atmar, R. G. (Mil.), San Antonio.
Bannister, M. H. (Mil.), San Antonio.
Baranco, Mildred W., San Antonio.
Barbato, Lewis (Mil.), San Antonio.
Barnett, John L. (Mil.), San Antonio.
Barton, Julian C., San Antonio.
Bates, Leroy E., San Antonio.
Beach, Asa, San Antonio.
Beal, Albert R., San Antonio.
Beck, Emma, San Antonio.
Berchelmann, Adolphus, San Antonio.
Bergfeld, Jack A. (Mil.), San Antonio.
Bernfield, Helen-Cannon, San Antonio.
Bernfield, Martin, San Antonio.
Biggar, J. H., San Antonio.
Bloom, Bernard H. (Mil.), San Antonio.
Boccelato, S. L., San Antonio.
Boehs, Charles J., San Antonio.
Bondurant, W. W., Jr. (Mil.), San Antonio.
Bonnett, Edith M., San Antonio.
Borsheim, Raymond S. (Mil.), San Antonio.
Bose, Edda von, San Antonio.
Boso, Fred M., San Antonio.
Bosshardt, C. E., (Mil.), San Antonio.
Bowen, P. G., San Antonio.
Bowen, Robt. E., Sr., San Antonio.
Bowen, Robt. E., Jr., (Mil.), San Antonio.
Boyd, G. D. (Mil.), San Antonio.
Boyd, Ina, San Antonio.
Brittain, Ruth, San Antonio.
Bronson, A. Scott, San Antonio.
Brown, Alexander A., San Antonio.
Burg, Edward M., San Antonio.
Burk, W. E., San Antonio.
Burleson, John H., San Antonio.
Bush, Howard M. (Pres.), San Antonio.
Butler, Thos. B. (Mil.), San Antonio.
Cade, Charles C., San Antonio.
Cade, William H., San Antonio.
Calder, Royall M., San Antonio.
Callan, John R., San Antonio.
Calvert, Hulon E. (Mil.), San Antonio.
Carnahan, Robt. G., Denver, Colo.
Cassity, J. C., San Antonio.

Cayo, Edward A., San Antonio.
Cayo, E. P., San Antonio.
Celaya, Henry, San Antonio.
Center, Wm. Massie, Houston.
Champion, A. N., San Antonio.
Shankin, Edgar D., San Antonio.
Childers, M. A. (Mil.), San Antonio.
Christian, Thomas E., San Antonio.
Clark, A. Fletcher, San Antonio.
Clark, A. F., Jr. (Mil.), San Antonio.
Clark, James W. (Mil.), San Antonio.
Clifton, Collis B., San Antonio.
Coates, Elmer T. (Mil.), San Antonio.
Cochran, J. L. (Mil.), San Antonio.
Cook, Clara G., San Antonio.
Cooper, Elmer E., San Antonio.
Cooper, Fred B. (Mil.), San Antonio.
Cooper, Jean Head, San Antonio.
Cooper, Melbourne J., San Antonio.
Copeland, Joseph B., San Antonio.
Cotham, C. M., San Antonio.
Cowles, A. G. (Mil.), San Antonio.
Coyle, Edward W. (Mil.), San Antonio.
Craig, Charles F., San Antonio.
Crain, Charles E. (Mil.), San Antonio.
Cresswell, Thomas A. (Mil.), San Antonio.
Crockett, R. H., San Antonio.
Culli, George O., San Antonio.
Cutter, Irving T., San Antonio.
Davis, Milton, San Antonio.
Davis, Raleigh L., San Antonio.
Delagoa, A. C., San Antonio.
De Leon, John J., San Antonio.
De Pew, E. V., San Antonio.
Dimmitt, Dean P. (Mil.), San Antonio.
Dittman, Charles H., San Antonio.
Donaldson, James M., Jr., San Antonio.
Donop, Perry T., San Antonio.
Dorbandt, Moss M., San Antonio.
Dorbandt, Thomas M., San Antonio.
Dreiss, A. M., San Antonio.
Dufner, Ronnie M. (Mil.), San Antonio.
Dumas, Edward D., San Antonio.
Edwards, Douglas, San Antonio.
Ellis, Sam, San Antonio.
Fetzer, William J., San Antonio.
Folbre, Thomas W. (Mil.), San Antonio.
Forbes, M. A., San Antonio.
French, Jack A. (Mil.), San Antonio.
French, Sanford W., San Antonio.
Fultz, B. Hugh, San Antonio.
Galloway, B. E., San Antonio.
Garnett, Walter L., Mexico City, Mex.
Garren, John T. (Mil.), San Antonio.
Geissler, Wallace H., San Antonio.
Gerodetti, O. F. (Mil.), San Antonio.
Geyer, George H., San Antonio.
Giesecke, Carl G. (Mil.), San Antonio.
Giles, Roy G., San Antonio.
Gill, William D., San Antonio.
Gleckler, John D. (Mil.), San Antonio.
Glober, Lee J., San Antonio.
Goeth, Carl F. (Mil.), San Antonio.
Goeth, Richard A., San Antonio.
Goetz, Jos. T. (Mil.), San Antonio.
Goode, John W., San Antonio.
Goodson, Thomas N., San Antonio.
Gonzales, H. N. (Mil.), San Antonio.
Gordon, Marie D., San Antonio.
Gossett, R. F. (Mil.), San Antonio.
Graves, Amos Maverick, San Antonio.
Graves, W. E., San Antonio.
Haggard, Charles H., San Antonio.
Haggard, Frank N., San Antonio.
Hairston, J. Thomas, San Antonio.
Hamilton, Lawrence E., San Antonio.
Hargis, W. Huard, Sr. (Mil.), San Antonio.
Hargis, W. Huard, Jr. (Mil.), San Antonio.
Harper, Mary C. (Hon.), San Antonio.
Hartman, Albert W. (Mil.), San Antonio.
Hartman, Henry C., San Antonio.
Heck, Wm. H. (Mil.), San Antonio.
Henry, C. D. (Mil.), San Antonio.
Henry, Mary M., San Antonio.
Helfer, Lewis M. (Mil.), San Antonio.
Herff, Adolph, Boerne.
Herff, Augustus F., San Antonio.
Herff, Ferdinand P., San Antonio.
Herff, John B., San Antonio.
Hill, Lucius D., Jr., San Antonio.
Hill, W. Herbert (Mil.), San Antonio.
Holshouser, Chas. A. (Mil.), San Antonio.
Hoskins, Henry R., San Antonio.
Howerton, Ernest E. (Mil.), San Antonio.
Hudson, Granville W. (Mil.), San Antonio.
Hunt, Kent N. (Mil.), San Antonio.
Jackson, Dudley, San Antonio.
Jackson, L. B., San Antonio.
Jackson, L. Walford, San Antonio.
Jackson, Martha Beal, San Antonio.
Jensen, Andrew M. (Mil.), San Antonio.
Jensen, Martin Hans, San Antonio.
Johnson, Harry McC., Jr., San Antonio.
Johnson, Max E. (Mil.), San Antonio.
Johnson, W. J., San Antonio.
Judkins, O. H., San Antonio.
Kahn, I. Stanley, San Antonio.
Kaliski, Sidney R. (Mil.), San Antonio.
Kasten, Leona, San Antonio.
Keating, Peter M. (Mil.), San Antonio.
Kelley, Cole, San Antonio.
Kenney, Nat M., San Antonio.
King, Albert C. (Mil.), San Antonio.
King, W. A., San Antonio.
Kitowski, C. B., San Antonio.
Kliefoth, Frederick H., San Antonio.
Koerth, Charles J., Junction.
Kopecky, Joseph, San Antonio.
Kopecky, Leon C., San Antonio.
Kupper, Roland C. (Mil.), San Antonio.
Ladd, Graham B., San Antonio.
Lampe, Margaret Ruth, San Antonio.
Lehmann, C. Ferd (Mil.), San Antonio.
Leopold, Henry N., San Antonio.
Letteer, C. Ralph (Mil.), San Antonio.
Livingston, Chas. S. (Mil.), San Antonio.
Lochte, E. R., San Antonio.
Lowry, S. T., San Antonio.
Lozano, Rafael, San Antonio.
Luedemann, Waldo S. (Mil.), San Antonio.
Lundgren, R. W. (Mil.), San Antonio.
Lyon, Ervin F., Jr. (Mil.), San Antonio.
Magrish, Philip (Mil.), San Antonio.
Manhoff, Louis J., San Antonio.
Manney, John E., San Antonio.
Martin, Frank M. (Mil.), San Antonio.
Martinez, Joseph J., San Antonio.
Matthaei, Pearl V., San Antonio.
Matthews, John L. (Mil.), San Antonio.
Maxwell, Ernest A. (Mil.), San Antonio.
Maxwell, W. Wortham, San Antonio.
May, Lester M. (Mil.), San Antonio.
Mayes, Lee Page, San Antonio.
McComb, Asher R. (Mil.), San Antonio.
McCorkle, R. G., San Antonio.
McCurdy, M. W. (Mil.), San Antonio.
McGehee, Charles L., San Antonio.
McIntosh, John A., San Antonio.
McMahan, John W., San Antonio.
McPeak, Edgar M. (Mil.), San Antonio.
Merrick, Edward H., San Antonio.
Milburn, Conn L., San Antonio.
Milburn, Kennedy A., San Antonio.
Mileau, Alexander, Jr., San Antonio.
Miller, John B., Sr., San Antonio.
Miller, John B., Jr., San Antonio.
Miller, Robt. A., San Antonio.
Minter, Merton M., San Antonio.
Montgomery, Mary Jo, San Antonio.
Moore, John M., San Antonio.
Moore, O. S., San Antonio.
Moore, S. Foster, Jr. (Mil.), San Antonio.
Moorehead, Wm. H. (Mil.), San Antonio.
Morgan, John B., San Antonio.
Mozersky, Victor (Mil.), San Antonio.
Mueller, Edwin L., San Antonio.
Muldoon, Wilfred E., San Antonio.
Nicholson, J. R., San Antonio.
Nisbet, Alfred A. (Mil.), San Antonio.
Nixon, James W., San Antonio.
Nixon, P. I., San Antonio.
Novak, J. J. (Mil.), San Antonio.
Novak, Lumir F. (Mil.), San Antonio.
Novoa, Enrique, San Antonio.
Nunn, J. A., San Antonio.
O'Brien, Minnie C., San Antonio.
Ogilvie, Henry H., San Antonio.
Orlando, A. M. (Mil.), San Antonio.
Oxford, Marvin B. (Mil.), San Antonio.
Pagenstecher, Gustav A., San Antonio.
Palmer, Jos. W. (Mil.), San Antonio.
Parker, T. T., San Antonio.
Parrish, Robt. E., San Antonio.
Parsons, John Charles, San Antonio.
Parsons, W. H. (Dead), San Antonio.
Partain, Jack M. (Mil.), San Antonio.
Partain, Robt. A. (Dead), San Antonio.
Paschal, Frank L., San Antonio.
Paschal, Geo. H., San Antonio.
Passmore, B. H., San Antonio.
Passmore, Glenn G. (Mil.), San Antonio.
Pawelek, Vincent S. (Mil.), San Antonio.
Phelps, Gardner D. (Mil.), San Antonio.
Pickett, Britton E., Jr., San Antonio.
Pinson, C. C., San Antonio.
Pipkin, J. Lewis, San Antonio.
Pomerantz, Robt. B. (Mil.), San Antonio.
Poth, Duncan O., San Antonio.
Potthast, Otto J., San Antonio.
Pressly, Thos. A., San Antonio.
Pridgen, John L., San Antonio.
Pritchett, A. Belvin, San Antonio.
Pyterek, Arthur B. (Mil.), San Antonio.
Rabel, John E., San Antonio.
Ramsdell, M. A., San Antonio.
Reily, William A., San Antonio.
Reinarz, B. H. (Mil.), San Antonio.
Reuter, Ernest George, San Antonio.
Reveley, Hugh Price, San Antonio.
Reveley, James E. L., San Antonio.
Rhea, Robt. L. (Mil.), San Antonio.
Rice, Lee (Mil.), San Antonio.
Ritch, Allen (Mil.), San Antonio.
Roan, Omer, San Antonio.
Robbins, Lewis C., San Antonio.
Roberts, R. A., San Antonio.
Robertson, Wilber F., San Antonio.
Rogers, Albert M. (Mil.), San Antonio.
Rosebrough, F. H., San Antonio.
Rosenzweig, Milton M., San Antonio.
Ross, Lloyd I., San Antonio.
Ross, Rex R., San Antonio.
Russ, Stirling E. (Mil.), San Antonio.
Russ, W. B., San Antonio.
Russell, Dan A., San Antonio.
Rutherford, Lafe, San Antonio.
Sacks, David R. (Mil.), San Antonio.
Saegert, August H. (Mil.), San Antonio.
Saenz, Daniel, San Antonio.
Salter, John J. (Mil.), San Antonio.
Sample, Roy O., San Antonio.
Schattenberg, Herbert J., San Antonio.
Schlecte, Marvin C. (Mil.), San Antonio.
Schorr, Arthur M., San Antonio.
Schwartzberg, Sam (Mil.), San Antonio.
Scott, Raymond E. (Mil.), San Antonio.
Scull, C. E., San Antonio.
Scull, Thomas J. (In.), San Antonio.
Severance, Alvin O. (Sec'y), San Antonio.
Sharp, Thomas H., San Antonio.
Shaw, Thad, San Antonio.
Shepherd, W. F., San Antonio.
Shipman, E. D., San Antonio.
Skinner, Ira C., San Antonio.
Skripka, Charles F., San Antonio.
Slayter, James E., San Antonio.
Smith, Bernard F., San Antonio.
Smith, John M. (Mil.), San Antonio.
Soma, Yone, San Antonio.
Sparks, John E., San Antonio.
Stansell, Paul Q. (Mil.), San Antonio.
Stanton, Wm. P. (Mil.), San Antonio.
Steed, P. Frank, San Antonio.
Steinberg, F. W. (Mil.), San Antonio.
Stevenson, Roger (Mil.), San Antonio.
Stieler, Albert, San Antonio.
Stout, B. F., San Antonio.
Stovall, Virginia S., San Antonio.
Sutton, Robt. S., Jr. (Mil.), San Antonio.
Sweet, Horace C., San Antonio.
Swinny, Boen (Mil.), San Antonio.
Sykes, E. Meredith, San Antonio.
Sykes, Edwin M., Jr. (Mil.), San Antonio.
Taylor, C. W., San Antonio.
Templeton, R. D., San Antonio.
Tennison, Chas. W. (Mil.), San Antonio.
Thomas, H. P., San Antonio.
Thomas, Robert P., San Antonio.
Thorner, Rosaling S., San Antonio.
Timmins, O. H., San Antonio.
Todd, David A. (Mil.), San Antonio.
Trevino, Saul S. (Mil.), San Antonio.
Tucker, Victor C. (Mil.), San Antonio.
Tullos, Hugh S., San Antonio.
Urrutia, Adolfo (Mil.), San Antonio.
Urrutia, Aureliano, San Antonio.
Urrutia, Carlos, San Antonio.
Venable, Charles S., San Antonio.
Venable, J. Manning, San Antonio.
Walker, Carl J., San Antonio.
Walthal, Walter (Mil.), San Antonio.
Watts, G. Graham (Hon.), San Antonio.
Watts, J. A., San Antonio.
Weatherford, E. W., San Antonio.
Weatherford, Jack M. (Mil.), San Antonio.
Webb, John B., Jr., San Antonio.
Weiss, Victor J., San Antonio.
Weisner, Wm. A. (Mil.), San Antonio.
Whitacre, F. Stanley, San Antonio.
Willerson, Eleanor T., San Antonio.
Willerson, J. E., San Antonio.
Willerson, William D., San Antonio.
Williams, V. H., San Antonio.
Wilson, Francis W. (Mil.), San Antonio.
Winter, John W. (Mil.), San Antonio.
Wolf, Wm. M. (Mil.), San Antonio.
Worsham, John W. (Mil.), San Antonio.
Wyatt, Byron W. (Mil.), San Antonio.
Yeager, Franklin W. (Mil.), San Antonio.
Zink, Pearl Louise, San Antonio.

COMAL COUNTY MEDICAL SOCIETY

Alverson, Donald R. (Mil.), New Braunfels.
Bergfeld, Arthur W. C., New Braunfels.
Frueholz, Bertha (Sec'y), New Braunfels.

Frueholz, Frederick, New Braunfels.
Hagler, Menan C., New Braunfels.
Hinman, Alexander J., New Braunfels.
Karbach, Hylman E. (Mil.), New Braunfels.
Wright, Rennie (Pres.), New Braunfels.

GONZALES COUNTY MEDICAL SOCIETY

Cogburn, C. C. (Sec'y), Nixon.
Elder, N. A., Nixon.
Holmes, George, Gonzales.
Sievers, Walter A. (Mil.), Gonzales.
Stahl, L. J. (Pres.), Gonzales.
Wilhite, Geo. W., Gonzales.

GUADALUPE COUNTY MEDICAL SOCIETY

Davis, Hugh L., Seguin.
Douthett, Jas. C. B., Seguin.
Heinen, Allen I. (Pres.), Seguin.
Knolle, R. L., Seguin.
Knolle, R. L., Jr. (Mil.), Seguin.
Mannheimer, Ilse H. (Sec'y), Seguin.
Mannheimer, W. H. (Mil.), Seguin.
Poth, Norman A., Seguin.
Randolph, Vivien P., Schertz.
Williams, Jesse B. (Mil.), Seguin.

KARNES-WILSON COUNTY MEDICAL SOCIETY

Blake, Jno. V. (Mil.), Floresville.
Bonstetter, Harold J., Kenedy.
Kent, Chas. M. (Pres.), Kenedy.
King, Stephen A., Karnes City.
Martin, Robt. G., LaVernia.
Oxford, Jerry W. (Sec'y), Floresville.
Quillian, Causey C. (Mil.), Kenedy.
Shannon, S. E. (Mil.), Karnes City.
Ware, Ella, Stockdale.

KERR-KENDALL-GILLESPIE-BANDERA COUNTIES MEDICAL SOCIETY

Barshay, Bernard, Legion.
Birt, John B., Woodman, Colo.
Black, Axel J., Kerrville.
Butler, James O., Bandera.
Curtis, Ward C., San Antonio.
Feller, Lorence W. (Pres.), Fredericksburg.
Fickessen, Wm. R., Kerrville.
Fowler, James L., Ingram.
Gallatin, Herbert H., Kerrville.
Gregg, Wm. Earl, Kerrville.
Harzke, Otto F., Comfort.
Jackson, John Dee (Sec'y), Kerrville.
Jones, Chas. C., Comfort.
Jones, Chas. C., Jr. (Mil.), Comfort.
Keidel, Victor, Fredericksburg.
Keyser, Lester L., Fredericksburg.
Knapp, Dwight R., Kerrville.
Matthews, C. B. (Mil.), Kerrville.
McClellan, Clarence, Kerrville.
Miller, Sidney (Mil.), Legion.
Packard, D. E. (Mil.), Kerrville.
Perry, James H., Fredericksburg.
Pfeiffer, H. G. (Mil.), Fredericksburg.
Phillips, Jim S. (Mil.), Rocksprings.
Swayze, Henry Y., Kerrville.
Thompson, Samuel E., Kerrville.
Wiedeman, J. E., Junction.

LA SALLE-FRIO DIMMIT COUNTIES MEDICAL SOCIETY

Barnard, W. L., Carrizo Springs.
Beall, Judson E., Pearsall.
Cook, John A. (Sec'y), Cotulla.
Fay, Harold W., Dilley.
Goodnight, James E., Pearsall.
Howard, Elmer M. (Pres.), Pearsall.
Lightsey, John N., Cotulla.
Lindley, Calvin D., Carrizo Springs.
Pickett, Britton E., Sr., Carrizo Springs.
Williamson, Levi C., Pearsall.
Woods, Geo. S., Divine.

MEDINA-UVALDE-MAVERICK-VAL VERDE-TERRELL-EDWARDS-REAL-KINNEY-ZAVALA COUNTIES MEDICAL SOCIETIES

Cox, Geo. W., Austin.
Crossley, S. W., Del Rio.
Cunningham, Geo. B., Uvalde.
Donaldson, Elizabeth, Del Rio.
Fielder, Darwin L., Uvalde.
Gates, Ellis F., Eagle Pass.
Graham, R. N., Del Rio.
Johnson, Thomas M., Del Rio.
La Forge, Hershall, Uvalde.
McWilliams, W. R., Del Rio.
Meredith, W. P. (Sec'y), Del Rio.
Merritt, Geo. H., Uvalde.
Montemayor, Raul M., Eagle Pass.
Poindexter, Cary A., Crystal City.
Ross, Horace B., Del Rio.
Sanders, Joe I., Del Rio.
Schulze, E. C., Del Rio.
Turner, John R., Uvalde.
Utterback, Alvin P. (Pres.), Brackettville.
Williamson, James D., Castroville.
Wood, Norman I., Uvalde.
Wood, Sterling C., Uvalde.

SIXTH OR CORPUS CHRISTI DISTRICT

Dr. J. G. Webb, Mercedes, Councilor.

BEE-LIVE OAK-McMULLEN COUNTIES MEDICAL SOCIETY

Edmondson, John W., Beeville.
Gipson, Carie D., Three Rivers.
Kirkland, Luman W. (Pres.), Beeville.
Lancaster, Howard E. (Mil.), Beeville.
McNeill, Scott E., Beeville.
Miller, Ernest E. (Mil.), Beeville.
Poff, Claud M., Tuleta.
Reagan, Tom B. (Sec'y), Beeville.
Sansom, Geo. W., George West.
Williamson, Chas. D., Three Rivers.

BROOKS-DUVAL-JIM WELLS COUNTIES MEDICAL SOCIETY

Atkinson, Newell W., Alice.
Bartlett, Glenn, Sr., Falfurrias.
Bartlett, Glenn, Jr., Falfurrias.
Dozier, Jos. V., Premont.
Duran, C. Armando, Victoria.
Joseph, Philip S. (Pres.), Alice.
Otkin, Chas. H., Falfurrias.
Thomas, James H., Freer.
Wyche, Geo. G. Sr. (Sec'y), Alice.

CAMERON-WILLACY COUNTIES MEDICAL SOCIETY

Allen, Geo. Earl (Sec'y), Harlingen.
Amidon, Chas. S., Harlingen.
Amidon, Vivien M., Harlingen.
Andrews, Thos. P., Brownsville.
Ashcraft, E. Jeff, Harlingen.
Baden, Erwin E. (Mil.), Raymondville.
Bartlett, Merrill S., Brownsville.
Beech, Geo. D., Rio Hondo.
Bennack, Geo. E. (Mil.), Raymondville.
Bleakney, Phil A. (Pres.), Harlingen.
Breeden, Roy F., Brownsville.
Calderia, Frederick D., Harlingen.
Calderoni, Francisco F. (Mil.), Brownsville.
Carranza, Enrique M., Brownsville.
Cash, Clarence M., San Benito.
Casey, James D. (Mil.), San Benito.
Conley, Chas. C., Raymondville.
Dashiel, Geo. R. (Mil.), Brownsville.
Davidson, Noah A., Harlingen.
Davis, Lum M., Harlingen.
Dawson, Calvin D., San Benito.
Deaton, D. Grady, Galena Park via Houston.
Eisaman, Ralph H., Brownsville.
Feener, Lester C. (Mil.), Harlingen.
Gallaher, Geo. L., Harlingen.
Harris, Wyly H., Raymondville.
Harrop, Leon L., Raymondville.
Hawkins, Beatrice W., Brownsville.
Heins, Otto H., Lyford.
Hockaday, James A., Port Isabel.
Kinder, Thurman A. (Mil.), Brownsville.
Lamm, Annie T., LaFeria.
Lamm, Heinrich, LaFeria.
LaMotte, Thos. J., Harlingen.
Lawrence, Oscar V., Brownsville.
Letzerich, Alfred M., Harlingen.
Longoria, Vidal, Brownsville.
Lyle, Chas. F., San Benito.
Morris, Edwin T., San Benito.
Olcott, Cornelius, Jr. (Mil.), Harlingen.
Para, Andrew W. (Mil.), Brownsville.
Peek, John S. (Mil.), Brownsville.
Pollard, Albert J., Harlingen.
Pope, Andrew J., LaFeria.
Reed, Emil P. (Mil.), Brownsville.
Rentfro, James L., Brownsville.
Ryan, Glen V. (Mil.), Harlingen.
Scanlan, Nestor (Mil.), Brownsville.
Shafer, Troy A., Harlingen.
Smith, F. Nestor, Harlingen.
Sprinkle, D. L., Harlingen.
Trible, John J., Brownsville.
Turner, William R., Harlingen.
Utley, Ralph E., Harlingen.
Vinsant, William J., San Benito.
Walsworth, Frank D., Harlingen.
Watkins, John C., Harlingen.
Works, Bynum M., Brownsville.
Yantis, Geo. R., Brownsville.

HIDALGO-STARR COUNTIES MEDICAL SOCIETY

Barnebee, James H., Mission.
Bennett, Frank W., McAllen.
Burnett, Thos. R., Mission.
Calderira, Anton D., Mercedes.
Conard, John W., Pharr.
DeWitt, J. L., Elsa.
Duncan, W. H., McAllen.
Edgerton, Mary H., Rio Grande City.
Frenzel, Paul H., Donna.
Garcia, Octavio, McAllen.
Glass, T. W., Weslaco.
Hamme, Curtis J., Edinburg.
Hamme, Ralph E., Edinburg.
Harrison, Jas. G., McAllen.
Hatfield, Walter H., McAllen.
Heidrick, D. L., Mercedes.
Ice, Noel C., McAllen.
Ivy, J. Bryan, Weslaco.
Lawler, Marion R., Mercedes.
Lockhart, J. P., Brady.
Mann, Harold W., McAllen.
Mannering, Melvin D., Alamo.
May, Joe W., Edinburg.
McCalip, Edwin L., Weslaco.
McKinsey, S. Joe, McAllen.
Mims, Chas. H., Mission.
Montague, L. J., Edinburg.
Moore, L. H., McAllen.
North, N. T., Mission.
Osborn, Alfred S. (Pres.), McAllen.
Osborn, Frank E., McAllen.
Pence, Roy W., San Juan.
Riley, Pat, Mission.
Scott, Kincy J., Pharr.
Schaleben, Henry O., Edinburg.
Smith, Edward G., Mercedes.
Smith, Mouldon, Mission.
Souda, Andrew, Pharr.
Tupper, Lewis N., Elsa.
Walker, Ottis (Sec'y), Mission.
Webb, J. B., Donna.
Webb, J. G., Mercedes.
Wells, Edmond D., Mercedes.
Wharton, J. O., McAllen.
Whigham, H. E., McAllen.
Whigham, W. E., McAllen.

NUECES COUNTY MEDICAL SOCIETY

Arnim, Landon C. (Mil.), Corpus Christi.
Ashmore, Alvin J. (Mil.), Corpus Christi.
Averback, Bert F., Corpus Christi.
Baldwin, Harvey C. (Mil.), Corpus Christi.
Barker, Wm. E. (Mil.), Corpus Christi.
Barnard, Wm. C., Corpus Christi.
Bickley, Estel T., Corpus Christi.
Blair, John V., Corpus Christi.
Bradley, David F., Corpus Christi.
Briggs, Harry A., Corpus Christi.
Carruth, W. E. (Hon.), Brownsville.
Carter, N. Dilford, Corpus Christi.
Clark, Dan H. (Mil.), Corpus Christi.
Cline, W. B., Jr., (Mil.), Corpus Christi.
Colef, Irving E., Corpus Christi.
Collins, Clarence B., Corpus Christi.
Colyer, Geo. E. (Mil.), Corpus Christi.
Concklin, C. Lewis (Mil.), Corpus Christi.
Cope, Solomon F., Corpus Christi.
Crain, Carroll F., Corpus Christi.
Danford, Edwin A., Corpus Christi.
Davis, Walter T., Corpus Christi.
Davisson, Arthur W., Corpus Christi.
Eckhardt, Kleberg (Mil.), Corpus Christi.
Edgerton, Geo. W., Corpus Christi.
Edwards, Thomas W., Corpus Christi.
Ellis, Frank A. (Mil.), Corpus Christi.
Frank, Thelma E., Corpus Christi.
Frasheur, Wm. E., Robstown.
Friedman, Bernard B., Corpus Christi.
Furman, McIver, Corpus Christi.
Gaddis, H. W. (Mil.), Corpus Christi.
Garcia, Jose A., Corpus Christi.
Garrett, Leslie M. (Mil.), Corpus Christi.
Gentry, Wm. H., Corpus Christi.
Ghormley, Mary O., Corpus Christi.
Ghormley, Wm. C. (Mil.), Corpus Christi.
Gibson, Norman T. (Mil.), Robstown.
Giles, E. Jack (Mil.), Corpus Christi.
Giles, Henry R., Corpus Christi.
Gill, E. King (Mil.), Corpus Christi.
Graham, Alice E., Corpus Christi.
Graham, Robt. H., Corpus Christi.
Gray, Paul M. (Mil.), Corpus Christi.
Grossman, Bernard B. (Mil.), Corpus Christi.
Grossman, Dave N. (Mil.), Corpus Christi.

Grossman, Saul, Corpus Christi.
Guttman, L. P., Corpus Christi.
Hamill, James J., Las Vegas, Nevada.
Harrell, Travis M., Corpus Christi.
Heaney, Harry G., Corpus Christi.
Heany, H. Gordon (Mil.), Corpus Christi.
Heany, Kathryn, Corpus Christi.
Hearne, Chas. A., Corpus Christi.
Hoffpauer, A. C. (Mil.), Corpus Christi.
Hollister, Wm. L., Corpus Christi.
Horbaly, William, Corpus Christi.
Hyder, Prentiss L., Corpus Christi.
Janssen, L. W. O., Corpus Christi.
Jasperson, Clarence P. (Sec'y), Corpus Christi.
Kelly, Francis B., Corpus Christi.
Kemp, Kenneth J., Corpus Christi.
Kennedy, Hugh A. (Mil.), Corpus Christi.
Koepsel, Orlando S. (Mil.), Corpus Christi.
Landesman, Jos D., Corpus Christi.
Lloyd, R. S., Corpus Christi.
Marler, Otis E., Corpus Christi.
Martin, Sterling B., Corpus Christi.
Mathis, Edgar G., Corpus Christi.
McBride, Wm. L., Corpus Christi.
McLaughlin, R. L., Corpus Christi.
Meador, C. N., Corpus Christi.
Moller, G. Turner, Corpus Christi.
Moody, Foy H. (Mil.), Corpus Christi.
Morgan, Chas. G., Corpus Christi.
Nast, Jerome, Corpus Christi.
North, Arthur, Corpus Christi.
O'Byrne, Geo. T., Corpus Christi.
Oliphant, T. Hillman, Corpus Christi.
Padilla, Arthur, Corpus Christi.
Perkins, Maury J., Corpus Christi.
Pilcher, John F. (Pres.), Corpus Christi.
Portela, Adolfe P., Corpus Christi.
Posner, Sidney (Mil.), Robstown.
Priday, Cedric, Corpus Christi.
Prothro, Ernest W., San Angelo.
Rhodes, William L., Corpus Christi.
Rosenheim, Phillip, Corpus Christi.
Sharp, James C. (Mil.), Corpus Christi.
Shinn, A. Lewis (Mil.), Corpus Christi.
Sigler, Robt. J. (Mil.), Corpus Christi.
Sloan, Joe M. (Mil.), Corpus Christi.
Sloan, John J. (Mil.), Corpus Christi.
Smith, Youel C., Corpus Christi.
Stewart, Chas. D., Corpus Christi.
St. John, R. V., Corpus Christi.
Stone, Belo, Robstown.
Stroud, S. K. (Mil.), Corpus Christi.
Swearingen, Robt. G. (Mil.), Corpus Christi.
Talley, O. H., Corpus Christi.
Thomas, Jorn R., Corpus Christi.
Triplett, Wm. C. (Mil.), Corpus Christi.
Watson, Clyde O., Corpus Christi.
White, H. A., Corpus Christi.
Williams, M. L., Robstown.
Williamson, C. M., Corpus Christi.
Wright, Virginia L. (Mil.), Corpus Christi.
Yeager, Chas. P., Corpus Christi.

SAN PATRICIO-ARANSAS-REFUGIO COUNTIES MEDICAL SOCIETY

Boykin, J. M. (Mil.), Taft.
Bull, John B., Aransas Pass.
Cockerham, Louis H., Sinton.
Cron, Chas. F. (Pres.), Rockport.
Curlee, Curtis L., Sinton.
Ewing, F. S. (Mil.), Sinton.
Finn, J. H. (Sec'y), Refugio.
Finn, Josephine S., Refugio.
Flynn, Eugene (Mil.), Refugio.
Glover, G. E., Austwell.
Guynes, W. A. (Mil.), Mathis.
Jenkins, Young S., Taft.
Jones, Edgar F. (Mil.), Aransas Pass.
Kendrick, M. C., Ingleside.
Koch, A. A. (Mil.), Ingleside.
Koontz, A. C. (Mil.), Woodsboro.
Shipp, H. H., Woodsboro.
Tasch, A. T. (Mil.), Taft.
Tompkins, D. R., Refugio.
Voss, A. H., Odem.
Woods, Haddon B. (Mil.), Refugio.
Zarsky, E. P. (Mil.), Refugio.

WEBB-ZAPATA-JIM HOGG COUNTIES MEDICAL SOCIETY

Austin, Holcomb M. (Pres.), Laredo.
Candlin, Geo. H., Laredo.
Canseco, Francisco M., Laredo.
Chapa-Badillo, Jesus, Laredo.
Cook, Albert T., Laredo.
Crawford, James K., Laredo.
de la Garza, Raul, Laredo.
Gonzales, Joaquin C., Laredo.
Guerra, M. Barrera, Hebbronville.
Graham, Steven H., Laredo.
Horton, Joseph J., Laredo.
Longoria, Enrique M., Laredo.
Lowry, Ruby S., Laredo.
Lowry, John T. (Sec'y), Laredo.
Musacchio, F. A., Laredo.
Powell, Wm. R., Laredo.
Rottenstein, Max, Laredo.
Shafer, Norman S., Laredo.
White, Hugh D., Monterrey, Mexico.
Wright, Ray B., Laredo.

SEVENTH OR AUSTIN DISTRICT

Dr. R. T. Wilson, Austin, Councilor.

CALDWELL COUNTY MEDICAL SOCIETY

DuBoise, Otho K. (Mil.), Lockhart.
Luckett, Francis C., Fentress.
Nichols, H. Clay, Sr., Luling.
Nichols, H. Clay, Jr., Luling.
O'Banion, John T. (Sec'y), Luling.
Pitts, Minor W. (Pres.), Luling.
Ross, Alanzo A., Sr., Lockhart.
Ross, Abner A., Jr. (Mil.), Lockhart.
Ross, Raleigh R. (Mil.), Lockhart.
Smith, Edgar, Lockhart.
Watkins, Walter P. (Mil.), Luling.

HAYS-BLANCO COUNTIES MEDICAL SOCIETY

de Steiguer, John R. (Sec'y), San Marcos.
Edwards, Louis L., San Marcos.
Flannery, John J. (Pres.), Blanco.
Kealey, Edward T., Johnson City.
Lancaster, York, San Marcos.
Lauderdale, Clay, Buda.
Sowell, Rugel F., San Marcos.
Van Ness, Julius M., San Marcos.
Williams, Wilburn C., San Marcos.

LAMPASAS-BURNET-LLANO COUNTIES MEDICAL SOCIETY

Allen, Geo. S. (Mil.), Burnet.
Black, D. W., Lampasas.
Brook, W. M., Lampasas.
Fowler, Wert D., Eden.
Gaddy, H. R., Lampasas.
Gray, Geo. L. (Pres.), Llano.
Hoerster, H. J. (Mil.), Llano.
Hoerster, Samuel A. (Mil.), Llano.
Landrum, Marvin M., Lampasas.
Rollins, H. B. (Mil.), Lampasas.
Shepperd, Joe A. (Sec'y), Burnet.
Shepperd, R. L., Llano.
Shepperd, R. R., Burnet.
Vaughn, Thos. D., Bertram.

LEE COUNTY MEDICAL SOCIETY

Mantzel, Sherwood W. (Pres.), Giddings.
York, Wm. E. (Sec'y), Giddings.

TRAVIS COUNTY MEDICAL SOCIETY

Allison, Bruce, Abilene.
Auler, Hugo A., Austin.
Bailey, Chas. W. (Mil.), Austin.
Bailey, Thomas B., Austin.
Barker, Paul W., Austin.
Black, W. B., Austin.
Blaustone, Henry H., Austin.
Bohls, S. W., Austin.
Bowden, A. M., Austin.
Brady, J. J. (Mil.), Austin.
Bratton, Robert (Mil.), Austin.
Brown, M. I., Austin.
Brownlee, C. H., Austin.
Carter, C. E., Austin.
Castner, Chas. W., Austin.
Chrisman, Wm. P. (Mil.), Austin.
Clark, Simon J., Austin.
Cleveland, G. W., Austin.
Cloud, Ralph E., Austin.
Coleman, James M., Austin.
Conn, Leslie D., Crystal City.
Cooper, R. A., Austin.
Cooper, S. S. (Mil.), Austin.
Crockett, John A., Austin.
Crowell, Caroline, Austin.
Darnall, Chas. M. (Mil.), Austin.
Dashiell, Albert M. (Mil.), Austin.
Davidson, Harry T., Austin.
Davis, Nathan (Mil.), Austin.
Dildy, Chas. B. (Mil.), Austin.
Dinwiddie, Robt. A., Austin.
Dyson, Thomas N., San Antonio.
Eckhardt, James W., Austin.
Eckhardt, Joe C. A., Austin.
Edens, Lee E., Austin.
Eppright, Ben R., Austin.
Esquivel, Sandi, Austin.
Frobese, Joe R., Austin.
Gambrell, Wm. M. (Pres.), Austin.
Garcia, Alberta G., Austin.
Gentry, Elizabeth F., Austin.
Gibson, J. W., Austin.
Gilbert, Joe, Austin.
Gilbert, Joe T. (Mil.), Austin.
Goddard, Walter C., Austin.
Gondolf, Harold, Austin.
Granberry, Howard, Jr., Austin.
Gregg, F. Banner, Austin.
Hardwicke, Chas. P. (Mil.), Austin.
Hay, Bruce H. (Mil.), Austin.
Heitzman, Celine I., Austin.
Henry, H. B., Austin.
Herrod, James H. (Mil.), Austin.
Hilgartner, H. L., Jr. (Mil.), Austin.
Holland, Lang F., Austin.
Holtz, Harvey E., Austin.
Houston, Wm. R., Austin.
Jackson, J. Warren, Austin.
Jaehne, Robt. J. (Mil.), Austin.
Johnson, J. Edward, Austin.
Jordan, R. C. (Mil.), Austin.
Kelton, W. W., Jr. (Mil.), Austin.
Key, Sam N., Austin.
Klotz, H. L., Austin.
Kreisle, M. F., Austin.
Lippman, Otto (Mil.), Austin.
Loving, James M., Austin.
Loving, Maribel, Austin.
Martin, Claude A. (Mil.), Austin.
Mathews, C. A. (Dead), Austin.
McCormick, Katherine, Austin.
McCrummen, Thos. D., Austin.
McElhenney, Thos. J., Austin.
Middlebrook, F. M., Austin.
Miears, Claud H., Austin.
Milligan, Barth, Austin.
Morgan, W. P., Austin.
Morris, Truman N., Austin.
Morrison, Robt. B., Austin.
Murray, R. V., Austin.
Nanney, A. L., Austin.
Neighbors, A. H., Austin.
Newman, H. W., Austin.
Nichols, J. R., Austin.
Paggi, Leonard C. (Sec'y), Austin.
Paine, Henry C. Austin.
Paterson, Elizabeth, Austin.
Peavy, Chas. D., Austin.
Post, Geo. W., Austin.
Price, Enoch C. (Mil.), Austin.
Primer, B. M. (Mil.), Austin.
Rabb, Virgil S., Jr. (Mil.), Austin.
Richardson, Dalton, Austin.
Robinson, Harold L. (Mil.), Austin.
Robinson, Wm. Lee, Austin.
Robison, James T., Austin.
Rothen, Robt. M. (Mil.), Austin.
Saldivar, Julian T. (Mil.), Austin.
Schiller, Nelson L., Austin.
Scott, H. A., Austin.
Scott, Z. T., Austin.
Shane, Hugh (Mil.), Austin.
Simpson, J. D., Austin.
Smith, Howard E., Austin.
Smith, Lawrence T., Austin.
Standifer, C. H., Dallas.
Suehs, Oliver W. (Mil.), Austin.
Suehs, P. E., Austin.
Swift, Edward V. (Mil.), Austin.
Terry, A. A., Austin.
Thomas, Harold R. (Mil.), Austin.
Thomas, J. C., Austin.
Thompson, Burch, Austin.
Thornhill, G. F., Austin.
Tisdale, Marie Correll, Austin.
Vieth, Richard P. (Mil.), Austin.
Wade, David, Austin.
Wagner, Robt. G. (Mil.), Austin.
Walters, Luther P., Austin.
Watt, Terrence N. (Mil.), Austin.
Watt, Will E., Austin.
White, B. O. (Mil.), Austin.
White, Forest A., Austin.
White, Paul L. (Mil.), Austin.
Willess, Hershel F., Austin.
Williams, Harriss, Austin.
Williams, Wm. E. (Mil.), Austin.
Wilson, R. T., Austin.
Woolsey, S. A., Austin.
Wooten, Joe S., Austin.
Zedler, Garland G. (Mil.), Austin.

WILLIAMSON COUNTY MEDICAL SOCIETY

Alexander, Margaret H. (Pres.), Taylor.
Atkinson, Ozias B., Florence.
Cooper, Dewey H., Georgetown.
Crawford, Clyde H., Bartlett.

Doak, Edmond, Taylor.
Feaster, Hezzie, Taylor.
Gregg, D. B., Round Rock.
Johns, Jay J. (Sec'y), Taylor.
Jopling, J. L. (Mil.), Taylor.
Kirkpatrick, B. A., Taylor.
Kirkpatrick, Roy H. (Mil.), Taylor.
Martin, John R., Georgetown.
Rice, Albert J. (Mil.), Georgetown.
Ross, Geo. D., Liberty Hill.
Sharp, Milton R., Granger.
Stromberg, Eric W., Taylor.
Swanson, Wayland R. (Mil.), Taylor.
Wedemeyer, Wm. C., Walburg.
Wheeler, H. P. (Mil.), Georgetown.

EIGHTH OR DEWITT DISTRICT

Dr. F. J. L. Blasingame, Wharton, Councilor.

COLORADO COUNTY MEDICAL SOCIETY

Cook, Chas. G., Weimar.
Kirkham, S. H., Columbus.
Laughlin, John R., Eagle Lake.
Peters, Leo J. (Sec'y), Schulenburg.
Potthast, A. H. (Pres.), Weimar.
Shult, C. I., Columbus.

DE WITT COUNTY MEDICAL SOCIETY

Arnecke, C. A. H., Arneckeville.
Bohman, Alfred J., Cuero.
Brown, Harry H., Yoakum.
Burns, John G., Cuero.
Cross, Geo. W., Yorktown.
Dobbs, James C., Cuero.
Douthit, Walton E., Cuero.
Duckworth, Guilford M. (Pres.), Cuero.
Eckhardt, Herman C., Yorktown.
Milner, Robert M., Yoakum.
Nau, Carl A., Galveston.
Nowierski, Leon W., Yorktown.
O'Quinn, Lafayette, Weestache.
Prather, Frank A. (Mil.), Runge.
Richter, Louis B. S., Yoakum.
Westphal, Corinne (Sec'y), Yorktown.
Westphal, Robert D. (Mil.), Yorktown.

FAYETTE COUNTY MEDICAL SOCIETY

Beckmann, Paul, LaGrange.
Boelsche, Leslie D. (Sec'y), LaGrange.
Guenther, Frank J., LaGrange.
Guenther, John C., LaGrange.
Kieke, August W., Round Top.
Luedemann, W. O., Schulenburg.
Miller, Arthur C. (Pres.), Carmine.
Schulze, Gene, Schulenburg.

LAVACA COUNTY MEDICAL SOCIETY

Boyle, James W. (Sec'y), Shiner.
Dufner, C. T. (Pres.), Hallettsville.
Jaeggli, Sam, Moulton.
Kopecky, Chas. L., Shiner.
Marek, E. H., Yoakum.
Renger, Harvey, Hallettsville.
Strieder, Hugo J. (Mil.), Moulton.
Wagner, Frank M., Shiner.
Williams, Robt. W. (Mil.), Shiner.

VICTORIA-CALHOUN-GOLIAD COUNTIES MEDICAL SOCIETY

Allen, Geo. W., Jr., San Antonio.
DeTar, Webb T., Victoria.
Ehlert, Edward A., Jr. (Sec'y), Victoria.
Gunter, Joseph T., Goliad.
Hartwick, Fred W. (Mil.), Victoria.
Hopkins, Joseph V., Victoria.
Lander, Roy S. (Mil.), Victoria.
Lester, Stanley W. (Mil.), Port Lavaca.
Mosley, R. A., Victoria.
Ogden, Urial B. (Mil.), Victoria.
Roemer, Fred J., Port Lavaca.
Ryon, Oscar H., Seadrift.
Sale, Walter W., Victoria.
Shields, Allan C., Victoria.
Shields, Fred B. (Pres.), Victoria.
Smith, David H. (Mil.), Victoria.
Story, Joseph R., Victoria.
Ward, Rawley W., Victoria.

WHARTON-JACKSON-MATAGORDA-FORT BEND COUNTIES MEDICAL SOCIETY

Andrews, Judson M., Wharton.
Balke, John W., Rosenberg.
Bauknight, J. M., Ganado.
Black, Vernon A. (Sec'y), Wharton.
Blair, William M., Wharton.
Blasingame, F. J. L., Wharton.
Brewer, Paul L., Bay City.
Byrd, Wallace, Wharton.
Davidson, G. L., Wharton.
Davidson, T. L., Wharton.
Dye, Fulton E., Bay City.
Giddings, H. D. (Mil.), El Campo.
Guffy, Joseph L., Palacios.
Halamicek, J. A., El Campo.
Johnson, R. G., Newgulf.
Kuykendall, H. D., Sugarland.
McGee, Borden M., Rosenberg.
Neal, T. M. (Pres.), Wharton.
Nichols, C. V., Richmond.
Outlar, L. B. (Mil.), Wharton.
Reeves, H. V., El Campo.
Roche, Buell F., Bay City.
Rugeley, Frank R., Wharton.
Schuhmann, J. Daniel, East Bernard.
Schulze, Gustave A., El Campo.
Shoultz, Chas. A., Bay City.
Simons, J. W., Newgulf.
Slaughter, Carlos A., Sugarland.
Thiltgen, Winston S., El Campo.
Wagner, J. R., Palacios.
Weeks, John W., Rosenberg.
Weinheimer, E. A., El Campo.
Whitfield, Walter E., Edna.
Yates, Chas. W. (Mil.), Rosenberg.
Yelderman, Gus C. (Mil.), Rosenberg.
Zipp, Raymond P., Edna.

NINTH OR SOUTHERN DISTRICT

Dr. J. E. Clark, Houston, Councilor.

AUSTIN-WALLER COUNTIES MEDICAL SOCIETY

Gordon, Virgil (Pres.), Sealy.
Hackfield, Alfred J., Industry.
Hover, Frank W., Sealy.
Jones, Malcolm A. (Mil.), Hempstead.
Neely, Jubol A., Bellville.
Roensch, Herbert E. (Sec'y), Bellville.
Steck, Otto E., Bellville.
Walker, Sidney C., Hempstead.
Witte, B. O., Fayetteville.

BRAZORIA COUNTY MEDICAL SOCIETY

Galloway, Wm. T., Freeport.
Greenwood, Wm. M., West Columbia.
Hampil, C. C., Brazoria.
Hayes, G. J., Alvin.
Holt, Wm. C., Angleton.
McCary, A. O., Freeport.
McCary, R. M., Freeport.
Merz, Herbert, Alvin.
Miller, Robt. C., Velasco.
Muetz, Walter, Pearland.
Reeves, Geo. D., Freeport.
Ryan, Wm. G., Freeport.
Slaughter, S. B., Jr., Freeport.
Stafford, Brooks (Sec'y), Angleton.
Weems, M. A., East Columbia.

BURLESON COUNTY MEDICAL SOCIETY

Goodnight, Thos. L. (Pres.), Caldwell.
Kozar, Joseph (Hon.), Somerville.
Pozdral, Geo. V., Somerville.
Siptak, John E. (Sec'y), Caldwell

GALVESTON COUNTY MEDICAL SOCIETY

Adriance, Carroll T. (Mil.), Galveston.
Anderson, Wm. T., LaMarque.
Andronis, Nicholas, Galveston.
Aves, Fred W., Galveston.
Barnes, Ralph E., LaMarque.
Baxter, Virgil C., Galveston.
Beeler, Geo. W. (Mil.), Texas City.
Blocker, Truman G., Jr. (Mil.), Galveston.
Brindley, Paul, Galveston.
Caravageli, M. A., Galveston.
Casey, Robt. E. (Mil.), Texas City.
Clark, Albert I. (Mil.), Galveston.
Cone, Robert E., Galveston.
Cooke, Willard R., Galveston.
Cruce, William V., Texas City.
Danforth, Duncan R. (Mil.), Galveston.
Dechard, Geo. M., Galveston.
Delaney, John T. (Mil.), Galveston.
DeLange, Arnott (Mil.), Galveston.
Duren, Norman (Mil.), Galveston.
Easin, Emmett M., Jr. (In.), Galveston.
Eggers, Geo. W. N., Galveston.
Ewalt, Jack R., Galveston.
Fisher, Wm. C., Jr., Galveston.
Fleming, Ben P., Texas City.
Ford, Hamilton F. (Mil.), Galveston.
Fowler, C. Frederick, Galveston.
Frank, Theodore Mc., Texas City.
Frazier, Chester N., Galveston.
Fuste, Carlos E. (Mil.), Galveston.
Garbade, Francis A., Galveston.
Gilliam, Cecil H. (Mil.), Galveston.
Gregory, Raymond L., Galveston.
Griffin, Lawrence L. (Mil.), Galveston.
Hanson, Arild E., Galveston.
Harris, Titus H., Galveston.
Herrington, D. J., Texas City.
Herrmann, Geo. R., Galveston.
Hoecker, Wade L., Galveston.
Hooks, Chas. A., Galveston.
Jarrell, Norman D., Texas City.
Jinkins, A. L. (Mil.), Galveston.
Jinkins, Julius L., Galveston.
Jinkins, Wiley J. (Hon.), Galveston.
Johnson, Jesse B., Galveston.
Kahn, G. Mason (Mil.), Galveston.
Klatt, Emil H., Galveston.
Kleberg, Walter, Galveston.
Knight, Maynard D., Galveston.
Kolb, Weldon G., Galveston.
Lee, Geo. T., Galveston.
Lefebar, Edward J., Galveston.
Levin, William C., Galveston.
McGivney, John, Galveston.
McKinley, Wesley F., Galveston.
McLarty, E. S., Galveston.
McReynolds, Geo. S. (Pres.), Galveston.
Magliolo, Joseph C. (Sec'y), Dickinson.
Manske, Gerhard R. (Mil.), Texas City.
Mares, Chas. F., Galveston.
Marr, Wm. L., Galveston.
Moore, Robert M. (Mil.), Galveston.
Parrish, B. R. (Mil.), Galveston.
Perlman, Bernard, Galveston.
Peters, Leo J. Jr., Texas City.
Poth, Edgar J., Galveston.
Potter, Wm. B., Galveston.
Prujansky, Nathan, Galveston.
Quinn, Clarence F. (Mil.), Texas City.
Randall, Ed., Jr., Galveston.
Reading, Wm. Boyd., Galveston.
Ritchie, Earl B., Galveston.
Robinson, H. Reid, Galveston.
Ross, Marcus Lamar, Galveston.
Ruskin, Arthur, Galveston.
Schmidt, Henry A., Texas City.
Schofield, Norman D., Galveston.
Schultz, Leon (Mil.), Galveston.
Schwab, Edward H., Galveston.
Sharp, Wm. B., Galveston.
Sheckles, Lloyd W., Jr. (Mil.), Galveston.
Shelton, Fred W., Galveston.
Singleton, Albert O., Galveston.
Slocum, Harvey C., Galveston.
Snodgrass, Samuel R., Galveston.
Spiller, Wm. F. (Mil.), Galveston.
Starley, Wm. F., Galveston.
Stone, Chas. T., Galveston.
Stephen, Weldon W. (Mil.), Galveston.
Sweets, Henry H., Galveston.
Sykes, Clarence S., Galveston.
Thiel, John M., Galveston.
Thompson, Edward R., Galveston.
Tomlinson, Lou M., Galveston.
Towler, Martin L. (Mil.), Galveston.
Twidwell, Leonard, Texas City.
Wall, Dick P., Galveston.
Wallace, Wm. S., Galveston.
Weaver, John D., Galveston.
Weinert, Herman, Jr. (Mil.), Galveston.
Weisz, Stephen, Galveston.
White, Weldon C. (In.), Galveston.
Otto, John L., Galveston.

GRIMES COUNTY MEDICAL SOCIETY

Coleman, S. D., Navasota.
Hansen, Carl M. (Mil.), Washington.
Harris, G. C., Jr. (Mil.), Navasota.
Ketchum, E. T. (Mil.), Navasota.
Parker, M. E., Anderson.
Sanders, G. C. (Pres.), Richards.
Stewart, H. L. (Sec'y), Navasota.

HARRIS COUNTY MEDICAL SOCIETY

Adam, Geo. F. (Mil.), Houston.
Adams, Granville Q., Houston.
Agnew, James H., Houston.
Alexander, Chas S., Houston.
Alexander, Herbert L. (Sec'y), Houston.
Alexander, Jewel C. (Mil.), Houston.
Allen, Leonardo, Houston.
Ames, Frederick D. (Mil.), Houston.
Andrews, Tom A., Jr. (Mil.), Houston.
Applebe, Edw. W., Houston.
Archer, Palmer M., Houston.
Armentrout, Coral R., Houston.
Arnold, E. M., Houston.
Ashmore, C. M., Houston.
Austraw, H. H. (Mil.), Houston.
Aves, Delano R., LaPorte.
Axelrod, A., Houston.

Aydam, C. W., Houston.
Babcock, Darrow S. (Mil.), Houston.
Bachtel, May B., Houston.
Baird, J. Byron, Pasadena.
Baird, Val C., Houston.
Barkley, Howard T. (Mil.), Houston.
Barnebee, James H. (Mil.), Houston.
Barnes, J. Peyton, Houston.
Barrett, John H., Houston.
Bartlett, Henry L. (Mil.), Houston.
Bayer, Bernard H., Houston.
Bell, Justin E., Houston.
Bell, William E. (Mil.), Houston.
Bennett, Wm. H., Humble.
Berry, Chas. R., Houston.
Bertner, E. W., Houston.
Best, Paul W., Houston.
Bickel, Laura C., Houston.
Billups, J. T. (Mil.), Houston.
Biscoe, Pat, Houston.
Blair, Lyman C., Houston.
Blair, Robert K., Houston.
Blish, M. Eleanor, Houston.
Bloom, Fred A. (Mil.), Houston.
Bloom, Manuel G. (Mil.), Houston.
Bloxsom, Allen P., Houston.
Blue, Jacob S., Houston.
Blundell, James R. (Mil.), Houston.
Boardman, Harriett L., Houston.
Bonham, Russell F., Houston.
Bonin, W. P. (Mil.), Houston.
Bost, James R., Houston.
Bourdon, Lynn L. (Mil.), Houston.
Bowen, Ralph, Houston.
Bowen, Shirley S., Houston.
Boyd, Adam N. Houston.
Boykin, Soloman R., Houston.
Braden, Albert H., Houston.
Bradford, F. Keith (Mil.), Houston.
Bradley, Raymond L., Houston.
Brandau, Geo. Henry, Houston.
Brandau, Geo. M., Houston.
Brannon, Jack G. (Mil.), Houston.
Brener, Lazard S. (Mil.), Houston.
Brener, Zidella S., Houston.
Bressler, J. L., Houston.
Brohn, Alfred J., Houston.
Brown, James A. (Mil.), Houston.
Brown, John W. (Mil.), Houston.
Bruce, Geo. Draper, Baytown.
Bruder, Wood H., Houston.
Bruhl, Chas. E., Houston.
Bruhl, Chas. K. (Mil.), Houston.
Bruhl, Dan E., Houston.
Brumby, Wm. M. (Hon.), Houston.
Bryan, W. G., Houston.
Bukowski, Lucian M., Houston.
Burg, Abner D., Houston.
Burge, Curtis H., Houston.
Burke, Thomas W., Houston.
Burr, Harry B. (Mil.), Houston.
Butaud, Russell S. (Mil.), Houston.
Buteria, James M. (Mil.), Houston.
Calaway, F. Otis, Houston.
Calhoun C. Alsworth, Houston.
Caplovitz, Harry, Houston.
Carrico, Carl C. (Mil.), Houston.
Carroll, Guy V., Houston.
Carter, Rexford (Mil.), Houston.
Chandler, E. A. (Mil.), Houston.
Chunn, Edward K., Houston.
Clapp, J. Alston (Mil.), Houston.
Clark, Wm. A., Houston.
Clarke, Herndon H., Houston.
Clarke, J. E., Houston.
Cockrell, John A. (Mil.), Houston.
Cody, Claude C., Houston.
Cohen, Raymond (Mil.), Houston.
Cole, Wm. Frank, Houston.
Coleman, Catherine E., Houston.
Collette, Allen (Mil.), Houston.
Collier, James L., Houston.
Collins, Ray G., Houston.
Compere, Tom H., Houston.
Connor, Edwin E., Pasadena.
Connor, Wm. Harris (Mil.), Houston.
Conte, Raphael (Mil.), Houston.
Coogle, C. P., Houston.
Coole, Walter A., Houston.
Cope, R. Louis, Houston.
Corbett, L. B., Houston.
Cotlar, Nathan, Houston.
Coulter, Wm. Wallace, Sanatorium.
Coulter, Wm. W., Jr., Houston.
Cowart, E. M. (Mil.), Houston.
Coxe, Lemuel F. (Mil.), Houston.
Crapitto, Louis A., Houston.
Crawford, Elizabeth S., Houston.
Crigler, Cecil M., Houston.
Crocker, Ed. S., Houston.
Cronin, Thomas D. (Mil.), Houston.
Cruse, Percy R., Houston.
Cull, Herbert G. (Mil.), Houston.
Cummings, Hatch W., Jr. (Mil.), Houston.
Cunningham, Geo. N. (Mil.), Houston.
Curb, Dolph L. (Mil.), Houston.
Cutler, Hayden H. (Mil.), Houston.
Dailey, James E. (Mil.), Houston.
Daily, Louis, Sr., Houston.
Daily, Louis, Jr. (Mil.), Houston.
Daily, Ray K., Houston.
Dargan, Joseph L., Houston.
David, Soloman D., Houston.
Davis, Chas. Q. (Mil.), Houston.
Davis, Hamlet I., Goose Creek.
Dawes, Raymond, Houston.
Day, Geo. P., Houston.
Denman, Peyton R., Houston.
Denzler, S. Russ, Houston.
DeVore, Neal M., Houston.
Dickson, J. Chas., Houston.
Dippel, A. Louis, Houston.
Doak, Edmond K., Houston.
Doak, N. P., Houston.
Dodge, Wm. E. (Hon.), Houston.
Dolph, Chancey H., Baytown.
Donohue, Wm. N. (Mil.), Houston.
Donovan, Thos. J. (Mil.), Houston.
Dornak, Franklin K. (Mil.), Houston.
DuBose, J. B. (Hon.), Humble.
DuCroz, J. L. (Mil.), Houston.
Duggan, Leroy B. (Mil.), Houston.
Duke, Herbert H., Goose Creek.
Duncan, Clara K., Houston.
Dunkerly, Allen K., Houston.
Dunnam, T. E., Houston.
Durham, Mylie E., Houston.
Durrance, Fred Y., Houston.
Dustin, Herman E., Houston.
Dwyer, Chas. A. (Mil.), Houston.
Echols, Raymond S., Houston.
Edwards, R. A. (Mil.), Houston.
Ehlers, H. Jack, Houston.
Ehrhardt, Wm., Westfield.
Eidman, F. G. (Mil.), Houston.
Ekman, C. J. Ivan, Houston.
Elles, Norma B., Houston.
Elliott, E. E., Houston.
Elliott, Monroe L., Houston.
Embree, Elisha D. (Mil.), Houston.
Englehardt, H. A., Houston.
Ernst, Frank J., Houston.
Estees, Berthold H. (Mil.), Houston.
Farfel, Bernard, Houston.
Faris, Arthur M. (Mil.), Houston.
Farrish, Geo. C., Houston.
Feagin, Horace C., Houston.
Filippone, John M., Houston.
Finney, R. Milton, Houston.
Fisher, Wilton M., Houston.
Fitch, Edw. O., Houston.
Fleet, Carl W. (Mil.), Houston.
Fleming, Paul D., Houston.
Flynn, James C., Houston.
Flynt, Otis P., Houston.
Foote, Stephen A., Jr. (Mil.), Houston.
Foster, Joe B., Houston.
Foster, John H., Houston.
Foster, Juanita E., Houston.
Frachtman, Hirsh J. (Mil.), Houston.
Frawley, J. T., Pasadena.
Freundlich, Thos. W., Houston.
Frey, Clarence E., Houston.
Friend, Victor V., Houston.
Gaines, Nemo D., Houston.
Gamble, J. F., Houston.
Gandy, D. Truitt, Houston.
Gandy, Joe R., Houston.
Gantt, Marvin A., Houston.
Gardner, Herman L., Houston.
Gardner, I. B. (Mil.), Houston.
Gardner, Robt. A. (Mil.), Houston.
Gaston, John Z., Houston.
Gates, Chas S., Jr., Houston.
Gemoets, Henry N., Houston.
Gerson, Gustav R., Houston.
Giessel, Lotta, Houston.
Gilbert, Howard P. (Mil.), Houston.
Glantzberg, Herman, Houston.
Glen, John K. (Mil.), Houston.
Glover, Frank S. (Mil.), Houston.
Goar, Everett L., Houston.
Gonzales, Angel G., Houston.
Gooch, Frank B., Houston.
Gooch, Frank B., Jr. (Mil.), Houston.
Goodloe, Noble M. (Mil.), Houston.
Goodwin, Roy T., Houston.
Goss, Jesse M., Houston.
Graves, E. Ghent (Mil.), Houston.
Graves, Marvin L. (Emr.), Houston.
Gready, Donald M., Houston.
Green, Chas. C., Houston.
Green, Wilbur K. (Mil.), Houston.
Greene, James A., Houston.
Greenwood, James, Houston.
Greenwood, James, Jr., Houston.
Greer, Alvis E., Houston.
Greer, Cecil, Houston.
Greer, V. David, Houston.
Griffey, Edw. W., Houston.
Griswold, C. M., Houston.
Grunbaum, Franz V., Houston.
Guthrie, Thos. H. (Mil.), Houston.
Haden, Henry C., Houston.
Hale, Richard A. (Dead), Houston.
Haley, John C., Houston.
Haley, S. Willard, Houston.
Hallson, Chas. H., Houston.
Hallson, D. C. Mc., Houston.
Ham. Goldie S., Houston.
Hamilton, Carlos R. (Mil.), Houston.
Hancock, Leslie D., Houston.
Handley, Lucius L., Houston.
Haney, Fred T., Houston.
Hankins, Lawson A., Goose Creek.
Hannon, Theo R. (Pres.), Houston.
Hardy, Sidney B. (Mil.), Houston.
Hargrove, R. M., Houston.
Harris, C. P., Houston.
Harris, Herbert H. (Mil.), Houston.
Harris, J. Wade, Houston.
Harris, Woodson W. (Mil.), Houston.
Harrison, Malcolm W. (Mil.), Houston.
Hartgraves, Ruth, Houston.
Harwood, Nathan, Houston.
Hauser, Abe (Mil.), Houston.
Hay, Celestine Rose, Houston.
Hayes, Herbert T., Houston.
Heard, J. G. (Mil.), Houston.
Henderson, Donald G. (Mil.), Houston.
Hensley, Barnes C. (Mil.), Houston.
Hild, Jack R. (Mil.), Houston.
Hill, Austin E., Houston.
Hill, James A., Houston.
Hill, Jasper H., Houston.
Hill, Joel M. (Mil.), Houston.
Hinds, Gordon F., Houston.
Hines, Norman D., Houston.
Hodde, Louis F., Houston.
Hodges, J. Edward, Houston.
Hoeflich, C. Wm., Houston.
Hoeflich, Werner F. (Mil.), Houston.
Holland, Clell G. (Mil.), Houston.
Holland, T. L, Houston.
Hollimon, James H. (Mil.), Houston.
Holloran, Richard J., Houston.
Hollub, Chas. J., Houston.
Holsomback, J. C., Goose Creek.
Hooker, Lyle, Houston.
Hopkins, J. J. (Mil.), Houston.
Hotchkiss, D. H., Jr. (Mil.), Houston.
Howard, A. Philo, Houston.
Howell, Theo. S., Baytown.
Huffman, M. M., Houston.
Hughes, Arranda A., Houston.
Hughes, Fred M. (Mil.), Houston.
Humphrey, S. G. (Mil.), Baytown.
Hutcheson, Allen C., Houston.
Iiams, Frank J., Houston.
James, A. Judson (Hon.), Houston.
Janse, H. M., Houston.
Jerabeck, John D. (Mil.), Houston.
Johnson, Herman W., Houston.
Johnson, R. M. (Mil.), Houston.
Johnson, Seale I., Houston.
Johnston, Robt. A., Houston.
Jones, J. Randolph (Mil.), Houston.
Jones, J. Thos., Houston.
Jones, Robt. R. (Mil.), Houston.
Jones, Thos. R., Houston.
Jorns, Cecil F. (Mil.), Houston.
Kalb, Theodore W., Houston.
Kaminsky, Dave (Mil.), Houston.
Karbach, Nelson W., Houston.
Karnaky, Karl J., Houston.
Karotkin, Lester, Houston.
Katribe, Paul (Mil.), Houston.
Kearby, Harold D., Houston.
Keiller, Violet H., Houston.
Kendall, Dean H., Houston.
Kennedy, Edwin J., Houston.
Kennerly, Thos. P., Houston.
Kerr, Chas. Denton (Mil.), Houston.
Kilgore, F. Hartman, Houston.
Kilgore, Morris W., Houston.
Kilgore, Newton A. (Mil.), Houston.
Kincaid, Harvey L., Houston.
Kirkham, H. L. D. (Mil.), Houston.
Kirkpatrick, L. P. (Mil.), Houston.
Klanke, Chas. W. (Mil.), Houston.
Kneip, August T., Houston.
Knolle, Ben E. (Mil.), Houston.
Knolle, Guy E. (Mil.), Houston.
Kootsey, Jos. S. (Mil.), Houston.
Kuebler, Luke W., Houston.
Kyle, J. Allen, Houston.

Lancaster, Edgar H., Houston.
Lancaster, Frank H., Houston.
Langford, Cohen H., Goose Creek.
Langston, John E., Houston.
Lapat, William, Houston.
Larsen, R. L. (Mil.), Houston.
Latimer, Mark H., Houston.
Lawrence, B. A. (Mil.), Houston.
Lechenger, Gilbert C., Houston.
Ledbetter, Abbe A., Houston.
Ledbetter, Paul, Houston.
Leggett, Milburn K. (Mil.), Houston.
Lerner, Ben L. (Mil.), Houston.
Lewis, Everett B. (Mil.), Houston.
Lewis, Leo Roy, Houston.
Levy, Mois D., Houston.
Leyva, Angel, Houston.
Ligon, Jos. G., Houston.
Liles, Ralph, Houston.
Lister, Sidney M., Houston.
Littell, Milton (Mil.), Houston.
Little, A. A. (Mil.), Houston.
Lockhart, Jessie A., Houston.
Logue, Lyle J., Houston.
Lowe, Thos. E. (Mil.) Houston.
Lucas, James B., Houston.
Ludeau, J. Ernest, Houston.
Lummis, Fred R., Houston.
Mabry, James D. (Mil.), Houston.
Mack, Frank A., Galena Park.
Madsen, Alva C., Houston.
Mangum, Hugh J. (Mil.), Houston.
Maresh, Henry R., Houston.
Maresh, Rudolph E., Houston.
Margraves, Ross D. (Mil.), Houston.
Marshall, Reagin M. (Mil.), Houston.
Marshall, Wm. E., Baytown.
Martin, James R. (Mil.), Houston.
Mayfield, Jack H. (Mil.), Houston.
McAllister, Finis E., Houston.
McConnell, Seth A. (Hon.), Houston.
McCulley, Jacobus D. (Mil.), Houston.
McDaniel, Walter S. (Mil.), Houston.
McFarling, J. E. (Mil.), Houston.
McGehee, Frank O., Houston.
McHenry, Rupert K., Houston.
McIndoe, Frank W., Houston.
McKay, Haden E., Humble.
McKay, Haden E., Jr. (Mil.), Humble.
McKeever, Duncan C. (Mil.), Houston.
McKinney, Mary Ann, Houston.
McMeans, Robt. H., Houston.
McMurrey, Allen L., Houston.
McNeill, A. S., Jr., Houston.
McReynolds, I. S. (Mil.), Houston.
McRoberts, Wm. A., Houston.
McWilliams, Hamlin K., Waller.
Melton, Walter T. (Mil.), Houston.
Mendell, David (Mil.), Houston.
Messer, Jesse N., Houston.
Meyer, Henry S. (Mil.), Houston.
Meynier, M. J., Jr. (Mil.), Houston.
Miller, Arthur L., Houston.
Mills, Newton W., Houston.
Mitchell, A. Lane (Mil.), Houston.
Mitchner, James M. (Mil.), Houston.
Mock, Pressley J., LaPorte.
Moers, Edwin A., Houston.
Mohle, Flavius D. (Mil.), Houston.
Molloy, James P., Jr., Houston.
Montgomery, Chas. F., Houston.
Mood, Geo. F. (Mil.), Houston.
Moody, Betty, Houston.
Moore, John T. (Emr.), Houston.
Morse, Walter S., Houston.
Motheral, Jefferson D., Katy.
Moursund, Walter H., Houston.
Much, Joseph C. (Mil.), Houston.
Mullen, Jos. A. (Hon.), Houston.
Myers, Claude D., Houston.
Myers, Leonard A., Houston.
Mynatt, Arthur J. (Hon.), Houston.
Neres, Fred E., Houston.
Nester, Chas. R. (Mil.), Houston.
O'Farrell, J. Mark (Hon.), (Dead), Houston.
O'Heeron, Michael K. (Mil.), Houston.
Ohlhausen, S. G. (Mil.), Houston.
Oldham, Dudley Y. (Mil.), Houston.
Oliver, John S. (Mil.), Houston.
Oliver, J. T., Houston.
Oliver, Wm. D., Galena Park.
Orman, McDonald, Houston.
Orr, Guy H. (Mil.), Houston.
Osborne, Clarence F., Pasadena.
Osmun, Paul M. (Mil.), Houston.
Overgaard, Anders P., Houston.
Owen, A. Geo., Houston.
Page, Jos. Herbert (Mil.), Houston.
Parish, Irving, Houston.
Park, James H., Jr., Houston.
Parr, Luther H., Houston.
Parrish, Frank F., Jr. (Mil.), Houston.
Parsons, A. M., Houston.
Paton, Donald M. (Mil.), Houston.
Patrick, Ralph C. (Mil.), Houston.
Patterson, Robt. T., Houston.
Patteson, James L. (Mil.), Houston.
Pawelek, Isidor L., Houston.
Pawelek, Louis G., Houston.
Perdue, Geo. W., Houston.
Peterson, Carl A., Houston.
Petersen, Henry A., Houston.
Petri, Karin A., Houston.
Petway, Max E. (Mil.), Houston.
Phillips, Elliott S., Houston.
Phillips, John R., Houston.
Phillips, Leon (Mil.), Houston.
Pickard, Alpha C., Houston.
Pipkin, Robert W., Baytown.
Pittman, James E. (Mil.), Houston.
Podesta, Louis N., Houston.
Pope, A. E. C., Crosby.
Potter, Leo E. (Mil.), Houston.
Potts, Chas. R., Houston.
Powell, Elizabeth B., Houston.
Powell, Norborne B., Houston.
Poyner, Herbert F., Houston.
Pratt, Willard M., Houston.
Prince, Homer E., Houston.
Pritchett, I. E., Houston.
Pugsley, Cornelius, Jr. (Mil.), Houston.
Pulliam, Lawrence T., Houston.
Pulliam, Seeley T., Houston.
Purdie, Robert M., Houston.
Qualtrough, Walter F., Houston.
Rader, John F., Houston.
Ralston, Wallace W., Houston.
Ramsay, Wm. E., Houston.
Raney, Lovel W., Houston.
Ray, John W., Houston.
Red, Wm. S., Jr., Houston.
Reece, Chas. D., Houston.
Reed, Roy W. (Mil.), Houston.
Reinke, Robt. T., Baytown.
Renfrow, W. Frank, Houston.
Robbins, E. Freeman, Houston.
Robbins, Frank L., Goose Creek.
Roberts, James A., Jr. (Mil.), Houston.
Robertson, R. C. L. (Mil.), Houston.
Robey, Grace Lucile, Houston.
Robinett, James B., Jr. (Mil.), Houston.
Robins, Bill (Mil.), Houston.
Robison, J. M., Houston.
Rohrer, Geo. E., Jr. (Mil.), Houston.
Rollins, Wiley J., Houston.
Royce, Thomas L., Houston.
Ruiz, John J., Houston.
Rumph, Quah (Mil.), Houston.
Rushing, John B., Houston.
Russell, Thos. G., Houston.
Ryan, Bert M. (Mil.), Houston.
Sacco, Allen C., Houston.
Salerno, Jos. P. (Mil.), Houston.
Salinger, Alfons (Mil.), Houston.
Salley, Calvin W. (Mil.), Houston.
Salmon, Geo. W., Houston.
Saunders, Chas. B., Houston.
Sanderson, Thos. A. (Mil.), Houston.
Sandlin, James W., Beaumont.
Sappington, H. O., Baytown.
Scardino, Peter H., Houston.
Schaefer, John K. (Mil.), Houston.
Schaffer, Elliott N. Houston.
Schaffer, Helen C., Houston.
Schaffer, Samuel S. (Mil.), Houston.
Schilling, John G., Houston.
Schnur, Sidney (Mil.), Houston.
Schoepfer, Rene F., Houston.
Scott, Daniel W., Houston.
Scull, Alvis Joe, Houston.
Seale, Everett R. (Mil.), Houston.
Sears, Ernest S. (Mil.), Houston.
Secrest, P. G., Jr. (Mil.), Houston.
Selders, Raymond E., Houston.
Senglemann, Wilbur A., Houston.
Shaffer, Carl F., Houston.
Shaw, Ed N., Houston.
Sherman, James E., Houston.
Sherrill, E. A., Sr., Houston.
Sherrill, E. A., Jr. (Mil.), Houston.
Sherill, Lloyd H., Houston.
Shirley, Carl W. (Mil.), Houston.
Skogland, John E., Houston.
Slataper, Felician J., Houston.
Smith, Benjamin F., Houston.
Smith, Burt B. (Mil.), Houston.
Smith, Clifford T., Houston.
Smith, Edward T., Houston.
Smith, Fred B. (Mil.), Houston.
Smith, J. Murry, Houston.
Snow, Wm. J., Houston.
Spencer, Walter C. E., Houston.
Spiller, J. B., Houston.
Spivak, Louis J., Houston.
Spurlock, G. H., Houston.
Stackhouse, Howard, Jr. (Mil.), Houston.
Stalnaker, Paul R., Houston.
Sterling, Russell R., Houston.
Stevenson, Wilmer M., Houston.
Stock, Geo. Ed, Jr., Houston.
Stokes, Merl B., Houston.
Stone, Francis E., Houston.
Stork, W. J. (Mil.), Houston.
Stough, John T., Houston.
Starshun, Mat F. (Mil.), Houston.
Strassmann, Erwin O., Houston.
Strozier, W. M., Houston.
Stucki, James M., Houston.
Swetland, Dan R. (Mil.), Houston.
Synnott, Thos G., Houston.
Tackaberry, Arthur L. W., Houston.
Talley, A. T., Houston.
Taubenhaus, Leon J. (Mil.), Houston.
Taylor, Martin J., Houston.
Theriot, Jos. Roy, Jr. (Mil.), Houston.
Thoma, Earl W., Houston.
Thomas, Charles, Houston.
Thomas, Geo. B., Houston.
Thompson, Benjamin D., Houston.
Thorn, S. W., Houston.
Thorning, W. B., Jr. (Mil.), Houston.
Trible, John M., Houston.
Truitt, James J., Houston.
Tucker, J. Norris (Mil.), Houston.
Turboff, Sidney W. (Mil.), Houston.
Turner, B. Weems, Houston.
Turner, Claude G. (Mil.), Houston.
Tusa, Theo. S., Houston.
Tuttle, L. L. D., Houston.
Ulert, Izaak A. (Mil.), Houston.
Vanzant, Birto T., Houston.
Vanzant, Thos. J. (Mil.), Houston.
Vaughn, Luther M. (Mil.), Houston.
Veatch, Everett P., Pasadena.
Vick, J. Louise, Houston.
VonPohle, Kenneth C., Houston.
Wachsman, David V., Houston.
Waldron, Geo. W., Houston.
Walker, Jos. D., Houston.
Wall, John A. (Mil.), Houston.
Wallace, Stuart A., Houston.
Wallis, Marshall, Houston.
Ward, Thos. E., Houston.
Warner, Clyde M., Houston.
Warner, Lucien M., Houston.
Waterman, John H., Houston.
Waters, Chas. R., Highlands.
Watson, Price T. (Mil.), Houston.
Weil, Sol B., Jr., Houston.
Weisiger, Ross W. (Mil.), Houston.
Welsh, Hugh C., Houston.
Westmoreland, Jas. P., Houston.
Westover, Harry M., Houston.
White, Adair W., Houston.
Whitsitt, Jas. J. (Mil.), Houston.
Wible, D. Jordan, Houston.
Wier, Warren M., Houston.
Wigby, Palmer E., Houston.
Wild, Wm. B., Pasadena.
Wilkerson, B. J., Houston.
Wilkerson, E. A. (Mil.), Houston.
Williford, L. E. (Mil.), Houston.
Wills, Seward H. (Mil.), Houston.
Wilson, Carl S., Houston.
Windrow, Nuel C., Jr. (Mil.), Houston.
Wolf, Edward T. (Mil.), Houston.
Wood, Martha A., Houston.
Wootters, John H., Houston.
Wright, Elva A. (Hon.), Houston.
Wright, Ernest, Houston.
York, Byron P. (Mil.), Houston.
York, John B., Houston.
Young, Carl B., Houston.
Youngblood, J. C. (Mil.), Houston.
Zarr, L. Lynn, Houston.
Zax, Emile, Houston.
Zeis, Leander B., Houston.
Zepeda, Rudolph F., Houston.
Zionts, M. A. (Mil.), Houston.

MONTGOMERY COUNTY MEDICAL SOCIETY

Bartell, Jack O., Conroe.
Coker, Geo. B., Tomball.
Corrigan, Joseph, Jr., Conroe.
Falvey, Thomas S., Conroe.
Hailey, Edwin B. (Pres.), Conroe.
Holland, Wm. M., Conroe.
Ingrum, W. P. (Sec'y), Conroe.

POLK-SAN JACINTO COUNTIES MEDICAL SOCIETY

Bergman, Sol H. (Mil.), Livingston.
Blow, Frank T., New Willard.
Dameron, J. H., Livingston.

Flowers, William W., Livingston.
Frink, Benton F. (Mil.), Corrigan.
Gardner, Thos L. (Sec'y), Livingston.
Grimes, Ivison, Camden.
Hale, Douglas M., Cold Springs.
Murphy, Clarence S., Livingston.
Olive, Roy A., Livingston.
Potts, S. E. (Pres.), Corrigan.
Towns, James R. (Hon.), Livingston.

WALKER-MADISON-TRINITY COUNTIES MEDICAL SOCIETY

Anderson, Edgar W., Velasco.
Autrey, Stacy L., Trinity.
Black, Frank R., Huntsville.
Briscoe, Sam M., Trinity.
Goodrich, Wm. A., (Sec'y), Huntsville.
Hanson, Minter D. (Pres.), Huntsville.
Jones, Wm. T., Huntsville.
Morris, James E., Madisonville.
McKay, James A., Madisonville.
Veazey, Wm. B., Huntsville.

WASHINGTON COUNTY MEDICAL SOCIETY

Hasskarl, Robert A., Brenham.
Hasskarl, Walter F., Brenham.
Hodde, Fred H., Brenham.
Hodde, Herman O. (Mil.), Brenham.
Knolle, Waldo A., Brenham.
Knolle, Roger E. (Pres.), Brenham.
Kusch, G. A. L., Gay Hill.
Nicholson, Richard E., Brenham.
Schoenvogel, Otto F. (Sec'y), Brenham.
Southern, Chas. E., Burton.
Steinback, Herbert L. (Mil.), Brenham.

TENTH OR SOUTHEASTERN DISTRICT

Dr. A. E. Sweatland, Lufkin, Councilor

ANGELINA COUNTY MEDICAL SOCIETY

Bledsoe, R. B. (Hon.), Lufkin.
Burch, Jos. S. (Mil.), Lufkin.
Childers, Dave M., Lufkin.
Clement, J. C. (Mil.), Lufkin.
Clements, Peyton C., Lufkin.
Dale, John R., Jr., Diboll.
Denman, Byford H. (Pres.), Lufkin.
Denman, Linwood H., Lufkin.
Estep, Marshall A., Lufkin.
Forrest, R. B., Huntington.
Gandy, Orren P., Lufkin.
Gibson, Mitchell O., Lufkin.
Herrington, E. R., Diboll.
Mathews, R. L. (Hon.), Lufkin.
Medford, Ulen G. (Mil.), Lufkin.
Ostendorf, W. A. (Mil.), Lufkin.
Stovall, W. R. (Mil.), Lufkin.
Sweatland, A. E., Lufkin.
Taylor, Robert W. (Sec'y), Lufkin.
Taylor, Thaddeus A., Lufkin.
Tinkle, Lassiter T., Lufkin.
Wade, Jack H., Lufkin.

HARDIN-TYLER COUNTIES MEDICAL SOCIETY

Anderson, Walter W. (Pres.), Kountze.
Barclay, Watt, Woodville.
Beazley, W. H., Silsbee.
Cox, Walter E., Angleton.
Darby, T. O., Sour Lake.
Fowler, I. R., Silsbee.
Knight, John A., Beaumont.
Lockey, Robt. P., Voth.
Mann, J. S., Colmesneil.
Poshataske, W. J. (Sec'y), Silsbee.
Roark, A. W., Saratoga.
Shivers, John F., Woodville.
Tate, R. A., Kountze.
Waller, Alvin L. (Mil.), Woodville.

JASPER-NEWTON COUNTIES MEDICAL SOCIETY

Dickerson, Joe H. (Mil.), Jasper.
Graham, Gideon (Pres.), Newton.
Graham, G. Mason, Bessmay.
Hall, Henry S., Newton.
Hardy, H. W., Jasper.
Kelly, W. R., Jasper.
McCreight, W. F., Kirbyville.
McGrath, J. J., Jasper.
Monroe, M. L. (Mil.), Jasper.
Richardson, A. J., Jasper.
Seale, James N. (Mil.), Jasper.
Worthy, W. R., Call.

JEFFERSON COUNTY MEDICAL SOCIETY

Alexander, Hugh E., Beaumont.
Allison, F. Peel (Mil.), Beaumont.
Autrey, A. R., Port Arthur.
Barr, Richard E., Beaumont.
Best, Harvey T., Port Arthur.
Bevil, H. Grady, Beaumont.
Bevil, John R., Beaumont.
Bevil, Lamar C. (Mil.), Beaumont.
Beyt, Frank J. (Mil.), Port Arthur.
Bialkin, George, Port Arthur.
Blum, S. L. (Mil.), Beaumont.
Boring, C. W., Port Arthur.
Brandau, W. H., Beaumont.
Brown, W. D., Beaumont.
Bybee, Joe A., Beaumont.
Byram, Dan H. (Mil.), Port Arthur.
Byrd, Lee Roy, Jr. (Sec'y), Port Arthur.
Carroll, Roland B. (Mil.), Port Arthur.
Carter, John H., Beaumont.
Chaisson, Mary P., Beaumont.
Chunn, B. D., Beaumont.
Colby, Fred W. C. (Mil.), Beaumont.
Covode, Wm. M. (Mil.), Port Arthur.
Crager, J. C., Beaumont.
Crumpler, W. E., Jr. (Mil.), Port Arthur.
Cunningham, M. A., Beaumont.
Curry, Dwight E. (Mil.), Port Arthur.
Darwin, P. S., Beaumont.
Davison, B. Howard, Port Arthur.
Eisenstadt, H. B., Port Arthur.
Elster, Benj. B., Port Arthur.
Engledow, R. H., Beaumont.
English, Dudley M. (Mil.), Beaumont.
Fears, T. A. (Mil.), Beaumont.
Ferguson, Edward C., Beaumont.
Fertitta, Julian J., Beaumont.
Fett, Bennie J., Port Arthur.
Frank, S. Rosa, Beaumont.
Fulbright, Carl W., Port Arthur.
Furey, Ellen D., Beaumont.
Fuselier, J. D., Port Arthur.
Gardner, John N., Beaumont.
Goldblum, Harvey H., Port Arthur.
Graber, W. J. (Mil.), Beaumont.
Granata, Samuel V., Beaumont.
Greenberg, Philip B., Beaumont.
Hager, Dale C., Beaumont.
Harlan, H. D., Beaumont.
Harper, J. Y., Port Arthur.
Hart, Frank B., Beaumont.
Hart, John A. (Mil.), Beaumont.
Heare, Louis C. (Mil.), Port Arthur.
Hendry, C. H., Beaumont.
Hines, J. C., Nederland.
Hosen, Harris (Mil.), Port Arthur.
Jackson, J. M., Port Arthur.
Jones, S. Ross, Port Arthur.
Jones, Thos. R. (Mil.), Beaumont.
Kaufman, Herschel J. (Mil.), Port Arthur.
Killingsworth, W. P. (Mil.), Port Arthur.
Knight, Max J., Port Arthur.
Kuhlman, Frederick Y., Port Arthur.
Ledbetter, L. H., Beaumont.
Lewis, Seab J. (Mil.), Beaumont.
Lightfoot, W. D., Beaumont.
Lindsey, Eugene H. (Mil.), Beaumont.
Loewenstein, Jos. M., Port Arthur.
Lombardo, R. T., Beaumont.
Long, James W. (Mil.), Port Arthur.
Lyons, Sam B., Beaumont.
Makins, James, Port Arthur.
Mann, D. A., Beaumont.
Markewitch, Jake (Mil.), Beaumont.
Martin, J. D., Beaumont.
Martin, T. W., Port Arthur.
Matlock, Thos. B. (Mil.), Port Arthur.
McFadden, Irma M., Port Arthur.
McRee, Walter E., Jr. (Mil.), Port Arthur.
McRee, Edgar C., Port Arthur.
Meyer, Paul R., Port Arthur.
Middleton, W. C., Beaumont.
Mills, E. D, Beaumont.
Mixon, Harold J., Beaumont.
Newton, W. A., Beaumont.
Nibling, Boyd (Mil.), Beaumont.
Orrill, R. Ray, Port Arthur.
Pace, B. F. (Mil.), Nederland.
Painton, Cliff E. (Mil.), Port Arthur.
Pecora, Tony L. (Mil.), Beaumont.
Petit, Paul T., Beaumont.
Pierson, Rogers, Beaumont.
Pitre, Roy P. (Mil.), Port Arthur.
Powell, L. C., Beaumont.
Pruit, L. T. (Mil.), Beaumont.
Raine, M. F., Port Arthur.
Raines, James M., Port Arthur.
Record, Joe, Beaumont.
Robert, Wm. Pierre (Mil.), Beaumont.
Sappington, T. B., Port Arthur.
Serafino, L. C., Beaumont.
Shaddock, C. B. (Mil.), Beaumont.
Sladczyk, George (Mil.), Port Arthur.
Smith, John M. (Mil.), Port Neches.
Smith, Wm. A., Beaumont.
Solis, G. R. (Mil.), Beaumont.
Stephenson, G. B. (Mil.), Beaumont.
Stevens, Robt. B. (Mil.), Beaumont.
Stoeltje, Joe, Beaumont.
Suehs, M. E., Jr., Beaumont.
Sutton, F. W., Beaumont.
Tatum, W. E., Beaumont.
Todd, Chas. H., Jr., Beaumont.
Toomin, Emanual, Beaumont.
Torbett, John W., Jr., Beaumont.
Tumbleson, Talbot A. (Mil.), Beaumont.
Tyndall, Thomas M., Beaumont.
Tyner, Furman H. (Mil.), Port Arthur.
Vaughan, B. H., Port Arthur.
Vaughan, E. W., Port Arthur.
Walker, Taylor C., Beaumont.
Wallace, Wm. G., Beaumont.
Ward, E. G., Beaumont.
Welch, J. G., Port Neches.
White, C. M., Beaumont.
White, J. Milton, Port Arthur.
Wier, D. S. (Hon.), Beaumont.
Wier, Stuart T. (Pres.), Beaumont.
Williams, F. G., Beaumont.
Williford, H. B. (Mil.), Beaumont.
Willoughby, Russell C. (Mil.), Groves.
Wilson, I. G. (Mil.), Beaumont.
Wood, Byron W., Port Arthur.
Woodall, John B., Port Arthur.
Young, Isaac T., Port Arthur.
Young, T. W., Jr., Port Arthur.

LIBERTY-CHAMBERS COUNTIES MEDICAL SOCIETY

Bellamy, Richard C., Daisetta.
Bevil, Jack, Hull.
Black, Roy C., Cleveland.
Bridges, W. H. (Mil.), Mont Belvieu.
Carr, K. K., Devers.
Clements, E. B., Cleveland.
Delaney, A. L., Liberty.
Fahring, Geo. H., Anahuac.
Fahring, Thos. L. (Mil.), Anahuac.
Griffin, Frank S. (Mil.), Liberty.
Jordan, B. L., Daisetta.
Leggett, Walter, Cleveland.
Richter, Ernest R. (Sec'y), Dayton.
Shearer, A. R., Mont Belvieu.
Sykes, Everett W. (Pres.), Anahuac.
Tadlock, J. T., Dayton.
Tucker, Eli J., Liberty.

NACOGDOCHES COUNTY MEDICAL SOCIETY

Barham, Geo. S., Nacogdoches.
Beall, J. Frank (Mil.), Nacogdoches.
Fuller, J. L., Garrison.
McKinney, Edgar P. (Mil.), Nacogdoches.
Middlebrook, Geo. F., Nacogdoches.
Nelson, A. Langston (Pres.), Nacogdoches.
Neuville, Carroll F., Nacogdoches.
Payne, C. M., Nacogdoches.
Rulfs, Carl H., San Augustine.
Smith, Clarence T., Nacogdoches.
Tucker, Felix R., Nacogdoches.
Tucker, F. Henry (Sec'y), Nacogdoches.
Tucker, Stephen B., Nacogdoches.

ORANGE COUNTY MEDICAL SOCIETY

Buttram, C. A., Orange.
Cecil, John G., Orange.
Covington, C. M., Orange.
Hawkins, Eugene W. (Sec'y), Orange.
Irwin, Hammer C., Orange.
Jones, Pearl E., Orange.
Kaplan, Hyman J. (Mil.), Orange.
Key, Harry H., Orange.
Pearce, H. Wynne, Orange.
Peebles, Felix, Jr., Orange.
Phillips, C. E., Orange.
Randolph, Boyette, Orange.
Richmond, Stanley M., Orange.
Schofield, Elmer C., Orange.
Smith, J. V., Orange.
Thompson, L. O., Orange.
Whitehill, Leo Allen, Orange.
Woolley, T. O. (Pres.), Orange.
Swickard, Geo. Y., Orange.

PANOLA COUNTY MEDICAL SOCIETY

Baker, Charles D., Carthage.
Boren, Shadrack L., Carthage.
Daniel, Zack L., Gary.
Hooker, Lynn C. (Sec'y), Carthage.
Hull, Chas. F. (Pres.), Carthage.
Smith, Arthur L., Houston.

RUSK COUNTY MEDICAL SOCIETY

Birdwell, J. A., Overton.
Boswell, Wm. E., Henderson.
Carnathan, Wm. G., Henderson.
Dawson, C. A. (Sec'y), Minden.
Dean, W. N., Paris.
Deason, Giles A., Henderson.
Deason, Lloyd S. (Mil.), Henderson.
Heilegman, Haskell, Overton.
Hilbun, Lynn, Henderson.
Hix, Oliver B., Henderson.
Lall, Shiam, Tulsa, Okla.
Pluenneke, Perry C., Overton.
Shipp, L. M., Henderson.
Watkins, J. E. (Pres.), Henderson.
White, W. P., Henderson.

SHELBY-SAN AUGUSTINE-SABINE COUNTIES MEDICAL SOCIETY

Copeland, Andrew G., Timpson.
Hurst, Thos. L., Center.
Oates, LaReid S., Center.
Smith, Gilbert E., Timpson.
Warren, Walter M., Center.
Warren, Wm. H. (Sec'y), Center.
Warren, Wm. S. (Mil.), Center.
Windham, John H., Shelbyville.
Windham, Wm. C. (Pres.), Center.

ELEVENTH OR EASTERN DISTRICT

Dr. A. L. Hathcock, Palestine, Councilor

ANDERSON-HOUSTON-LEON COUNTIES MEDICAL SOCIETY

Barclay, Sam D., Crockett.
Bing, Roland E., Oakwood.
Butler, Chas. W., Jr., Crockett.
Carter, J. Weldon (Mil.), Palestine.
Cole, W. A., Normangee.
Davis, W. E., Elkhart.
Dean, John L., Jr. (Sec'y), Crockett.
Farmer, Robt. A., Grapeland.
Felder, Fred E., Palestine.
Funderbunk, Wm. O., Palestine.
Hathcock, Alfred L., Palestine.
Haverlah, Harry A., Palestine.
Hester, Nell M., Buffalo.
Humphries, John T., Palestine.
Hunter, Ripley H., Palestine.
Hunter, Rush Q., Palestine.
Joyce, Claude D., Jr., Palestine.
Kennedy, Sam, Grapeland.
King, Marion A., Frankston.
McLeod, Robert H., Palestine.
Moss, Geo. H., Frankston.
Powell, E. P., Centerville.
Rogers, Jos., Normangee.
Scarborough, E. H., Poynor.
Speegle, Andrew A., Palestine.
Stokes, Paul B., Crockett.
Tenney, Leighton P., Buffalo.
Trice, LeRoy (Pres.), Palestine.
Wages, Allen D., Palestine.
Wootters, John S., Crockett.

CHEROKEE COUNTY MEDICAL SOCIETY

Bone, J. N., Jacksonville.
Bullion, Chas. F., Dallas.
Burnett, E. W., Rusk.
Cobble, Thos. H. (Sec'y), Rusk.
DuBose, J. L., Wells.
Evans, Charles W., Apple Spring.
Gray, D. F., Houston.
Greenwood, J. T., Ponta.
Hall, Robt. L. (Pres.), Rusk.
Hanretta, A. T., Austin.
Johnson, John F., Rusk.
Kuykendall, M. J., Rusk.
Lamb, Marvin, Jacksonville.
McDonald, W. A., Alto.
McDougle, John B., Jacksonville.
Moseley, E. M., Rusk.
Sory, W. H., Jacksonville.
Stripling, C. H., Jacksonville.
Travis, J. M., Jacksonville.
Travis, L. L., Jacksonville.
Travis, R. T., Jacksonville.
Urban, Kay B., Rusk.

FREESTONE COUNTY MEDICAL SOCIETY

Bonner, Leslie L., Fairfield.
Gage, Maurice (Pres.), Teague.
Harrison, Wm. P., Teague.
Headlee, Emory V. (Sec'y), Teague.
Sneed, Wm. N., Fairfield.

HENDERSON COUNTY MEDICAL SOCIETY

Baugh, Joseph F., Chandler.
Cockerell, Lonnie L., Athens.
Geddie, Nolan D., Athens.
Henderson, Roy E., Athens.
Hodge, Robert H., Athens.
Horton, Arthur C. (Pres.), Brownsboro.
Kilman, Prather T., Malakoff.
Price, Don (Sec'y), Athens.
Schmitt, Herbert S. (Mil.), Malakoff.
Webster, John K. (Hon.), Athens.

SMITH COUNTY MEDICAL SOCIETY

Bailey, Wm. Marvin (Sec'y), Tyler.
Bell, Geo. G., Tyler.
Birdwell, James W. (Mil.), Tyler.
Bradford, Sidney Wm., Tyler.
Brown, Glynne, Tyler.
Brown, Irving, Tyler.
Bundy, David T., Tyler.
Bryant, W. Howard, Tyler.
Cain, Wm. Roy, Tyler.
Caldwell, Elbert H. (Mil.), Tyler.
Clawater, E. W., Tyler.
Cook, Lane B. (Mil.), Tyler.
Dickson, James R., Arp.
Faber, Edwin G. (Mil.), Tyler.
Faust, John J., Tyler.
Gibson, Jesse W., Lindale.
Goldfeder, Jesse (Mil.), Tyler.
Jarmon, Thomas M., Tyler.
Marshall, Robt. L., Tyler.
McDonald, Conrad C., Tyler.
McMillan, Bruce, Shreveport, La.
Mitchell, John H., Tyler.
Moore, Masters H. (Mil.), Tyler.
Neill, Lex T. (Mil.), Tyler.
Page, Roy Lee, Tyler.
Rhine, Leland R. (Mil.), Tyler.
Rice, Elbert D. (Pres.), Tyler.
Ross, Wm. Rutledge, Tyler.
Sehested, Herman C. (Mil.), Tyler.
Shirley, Thos. Clayton, Tyler.
Smith, John C., Winona.
Stanley, Mildred, Tyler.
Thompson, Orion, Tyler.
Vaughn, Edgar H., Tyler.
Vaughn, James M. (Mil.), Tyler.
Walker, U. G. M., Flint.
Willingham, Chas. E., Tyler.
Windham, Lynn B., Tyler.
Woldert, Albert, Tyler.
Young, Cuthbert B., Tyler.

TWELFTH OR CENTRAL DISTRICT

Dr. G. V. Brindley, Temple, Councilor

BELL COUNTY MEDICAL SOCIETY

Alsup, Ace H., Temple.
Anderson, Harold B., Temple.
Archer, Thos. J., Jr., Temple.
Barnes, Thos. S. (Mil.), Temple.
Bassel, Paul M., Temple.
Bauman, John E., Temple.
Blanton, Bassel N. (Mil.), Temple.
Bradfield, Eldon O., Temple.
Brindley, Geo. V., Temple.
Bunkley, Thelbert F., Temple.
Burow, F. Paul, Killeen.
Chernosky, William A., Temple.
Christian, John J. (Mil.), Temple.
Cooke, Mildred L., Shreveport, La.
Crumpler, Prentice, Jr., Temple.
Curtis, Raleigh R., Temple.
Curtis, Richard C. (Pres.), Temple.
Ellis, Ira D., Troy.
Fowler, Joe A., Killeen.
Gillespie, Chas. H. (Mil.), Temple.
Gober, Olin B. (Sec'y), Temple.
Gober, Olin F., Temple.
Greenlee, Ralph G. (Mil.), Temple.
Greenwood, Joseph H., Temple.
Hammond, Fred M. (Mil.), Temple.
Harlan, Rudolph K., Temple.
Howell, Floyd W., Temple.
Jenkins, Jesse G., Temple.
Kilman, Jos. R. (Mil.), Temple.
Kirksey, O. T., Jr. (Mil.), Temple.
Longmire, Victor M., Temple.
Maxwell, Walter J., Jr., Temple.
McCelvey, John S., Temple.
McDavitt, Bertha S., Temple.
McKenney, John F. (Mil.), Temple.
Moon, Arthur E., Temple.
Moreton, Robert D., Temple.
Phillips, Chas., Temple.
Pittman, John W., Belton.
Pollok, Lewis W., Temple.
Potter, Claudia, Temple.
Powell, William N. Temple.
Prieto, Phillip M. (Mil.), Temple.
Ramey, Paul M., Temple.
Robinson, James E., Temple.
Rodarte, Jose G., Temple.
Scott, Arthur C., Jr., Temple.
Seedorf, Everett E., Temple.
Sewell, Harvey W., Belton.
Sewell, Julian G., Belton.
Sherwood, Marcel W., Temple.
Simmon, Vincent J., Temple.
Simpson, Chas. M., Temple.
Smith, Travis (Mil.), Temple.
Speed, Terrell, Temple.
Stevenson, Clyde A., Temple.
Stuart, Lawrence D., Temple.
Sutton, Robert S., Bartlett.
Talley, Lewis R., Temple.
Tulloch, Geo. M., Okmulgee, Okla.
Wallace, B. C., Jr. (Mil.), Temple.
Wheelis, Paul M., Temple.
Wiedeman, Andrew E., Temple.
Winston, John R., Temple.
Wolf, A. Ford, Temple.
Woodson, Burbank P., Temple.
Woodson, Warren Burbank, Temple.

BOSQUE COUNTY MEDICAL SOCIETY

Blankenship, W. W., Mosheim.
Calhoun, James S., Walnut Springs.
Cate, Clifton C., Morgan.
Goodall, Van D. (Pres.), Clifton.
Holt, Russell D., Jr. (Sec'y), Meridian.
Holt, Russell D., Sr., Cranfills Gap.
Long, Austin M., Valley Mills.
Murray, Jas. A., Walnut Springs.
Pike, Arthur N., Iredell.
Shipp, J. R. (Mil.), Cranfills Gap.
Witcher, Seth L. (Mil.), Clifton.

BRAZOS-ROBERTSON COUNTIES MEDICAL SOCIETY

Andres, Dwight W., College Station.
Boguskie, Wm. M., Hearne.
Cline, Wm. B., Bryan.
Fox, Kermit W. (Mil.), Bryan.
Grant, R. B., Jr. (Mil.), Bryan.
Harrison, R. H., Jr. (Mil.), Bryan.
Hunnicutt, Robt. J., Bryan.
Marsh, John E. (Pres.), College Station.
Parker, Wm. S., Calvert.
Perry, James S., Bryan.
Richardson, S. C., Bryan.
Sanders, J. G., Bremond.
Searcy, R. M. (Mil.), Bryan.
Searcy, Thomas A. (Mil.), Hearne.
Seastrunk, Oliver C. (Mil.), Bremond.
Taylor, W. C., Jr. (Mil.), Calvert.
Walton, Thomas O., Jr. (Sec'y), Bryan.
Walton, Thos. T., Bryan.
Wilkerson, Lonnie O., Bryan.
Woodard, Paul A., Bryan.

CORYELL COUNTY MEDICAL SOCIETY

Brown, John T., Gatesville.
Hall, T. M., Gatesville.
Hamilton, J. H., Gatesville.
Haynes, Henry M., Gatesville.
Jones, Dean B. (Mil.), Gatesville.
Jones, Kermit R. (Sec'y), Gatesville.
Lowrey, E. E. (Mil.), Gatesville.
Lowrey, M. W. (Pres.), Gatesville.

ERATH-HOOD-SOMERVELL COUNTIES MEDICAL SOCIETY

Bryan, T. F., Dublin.
Cragwell, A. O. (Pres.), Stephenville.
Currie, A. B., Groveton.
Hanna, J. J., Glen Rose.
Langford, W. L., Hamilton.
Lankford, A. E., Stephenville.
Mulloy, J. J., Stephenville.
Mulloy, Mary E. (Mil.), Stephenville.
Scherman, Albert J., Stephenville.
Terrell, J. C., Stephenville.
Terrell, Vance (Sec'y), Stephenville.

FALLS COUNTY MEDICAL SOCIETY

Avent, Benjamin M., Rosebud.
Barnett, John B., Marlin.
Barnett, John H., Marlin.
Bennett, A. C. (Mil.), Marlin.
Brown, J. M. (Mil.), Marlin.
Buie, Neil D., Jr. (Mil.), Marlin.
Buie, Neil D., Sr. (Pres.), Marlin.
Carter, Louian C. (Mil.), Marlin.
Collier, Joel I., Marlin.
Cornwell, Chas. H. (Mil.), Marlin.
Curry, Hardy P., Marlin.
Davison, Milton A., Marlin.

Garrett, Henry S., Marlin.
Glass, Thomas G., Marlin.
Hampshire, Geo. H., Marlin.
Hipps, Herbert E. (Mil.), Marlin.
Hutchings, Edgar P., Marlin.
Jansing, Bernard A., Lott (Rt. 3).
Price, Chester A., Marlin.
Roach, Thos. S., Laredo.
Smith, Howard O. (Mil.), Marlin.
Smith, Walter S. (Mil.), Marlin.
Swepston, Happy J., Rosebud.
Torbett, J. W., Sr. (Sec'y), Marlin.
Von Tobel, Albert E., Marlin.

HAMILTON COUNTY MEDICAL SOCIETY

Cleveland, Chas. C. (Sec'y), Hamilton.
Kennedy, Francis P. (Pres.), Carlton.
Knight, James B., Hamilton.
Kooken, R. A. (Mil.), Hamilton.
West, Robt. C. (Mil.), Hamilton.

HILL COUNTY MEDICAL SOCIETY

Arledge, William I., Hillsboro.
Barnes, Livingston, Hubbard.
Barnett, Thos. R., Hillsboro.
Beskow, Richard N., Hillsboro.
Boyd, James E. (Sec'y), Hillsboro.
Buie, James S., Mertens.
Campbell, Clark C., Itasca.
Foster, Dee R., Itasca.
Garrett, Chas. A., Hillsboro.
Hunt, John D., Aquilla.
Jenkins, Gaines H., Bynum.
Mahaffey, Howard A., Hillsboro.
McDonald, J. Frank., Hillsboro.
McPherson, A. B. (Hon.), Lovelace via Hillsboro.
McPherson, Garland, Hillsboro.
Morris, Thos. M., Mount Calm.
Sammons, Howard P., Hubbard.
Sims, Foster D., Rusk.
Smith, Ben C. (Pres.), Hillsboro.
Smith, Nellins C. (Mil.), Hillsboro.
Zacharias, O. G., Topeka, Kans.

JOHNSON COUNTY MEDICAL SOCIETY

Anderson, C. C., Venus.
Ball, W. P., Cleburne.
Bradford, C. C., Godley.
Cooke, C. C., Cleburne.
Dennis, Mills, Cleburne.
Doughtie, J. L. (Mil.), Cleburne.
Edgar, C. L., Cleburne.
Honea, Thos. C. (Mil.), Cleburne.
Jowell, C. C. (Sec'y), Cleburne.
Kimbro, Robt. W. (Mil.), Cleburne.
Knox, M. T. (Pres.), Cleburne.
Little, John G., Cleburne.
Pickens, Jay W. (Mil.), Cleburne.
Rudd, Lawrence H. (Mil.), Burleson.
Smyth, O. T., Jr. (Mil.), Cleburne.
Stallcup, J. M., Cleburne.
Washburn, W. R., Cleburne.
Whitehouse, Wm. R., Cleburne.
Yater, R. E. Lee, Cleburne.
Yater, T. F. (Mil.), Cleburne.

LIMESTONE COUNTY MEDICAL SOCIETY

Brown, Marion M. (Sec'y), Mexia.
Christoffer, O. T. (Pres.), Mexia.
Cromeans, Randall E., Mexia.
Edgar, Cecil C., Mexia.
McKenzie, Casimir P., Mexia.
Strode, Willard L., Groesbeck.

McLENNAN COUNTY MEDICAL SOCIETY

Aide, Lewis G., Bellmead.
Alexander, R. B., Waco.
Alexander, Boyd D., Waco.
Alspach, Harold M. (Mil.), Waco.
Aynesworth, Horace T., Waco.
Aynesworth, M. B. (Mil.), Waco.
Baker, Mark D., Waco.
Barnes, Maurice C. (Mil.), Waco.
Bell, R. B., Waco.
Black, W. A. (Mil.), Waco.
Bradford, J. C., Mart.
Brooks, C. H., Waco.
Bullard, Ray E. (Mil.), Waco.
Burgess, John L. (Mil.), Waco.
Cannon, I. F., Mart.
Carlisle, M. C. (Mil.), Waco.
Catto, Chas. G., Waco.
Coffelt, Ralph L. (Mil.), Waco.
Collins, Chas. E., Waco.
Collins, C. T., Waco.
Collom, C. C., Mart.
Connally, H. F., Waco.
Connally, Herschel F., Jr. (Mil.), Waco.
Crosthwait, R. Wilson, Waco.
Crosthwait, W. L., Waco.
Dudgeon, H. R., Waco.
Dudgeon, H. R., Jr. (Mil.), Waco.
Earle, Hallie, Waco.
Edwards, Tom G. (Mil.), McGregor.
Garrett, James M., Waco.
Germany, H. J., Waco.
Gidney, Wm. H., West.
Goodman, Aubrey L., Waco.
Hale, James W. (Hon.), Waco.
Hale, Robert A., Waco.
Hanks, Robert J., Waco.
Harrington, John T., Waco.
Hawkins, W. W. (Mil.), McGregor.
Hoehn, F. William, Waco.
Husbands, Tom L., Waco.
Jaworski, H. (Mil.), Waco.
Jenkins, I. Warner, Waco.
Johnson, Ernest A., McGregor.
Kee, John L., Waco.
Klatt, Wesley W., Waco.
Kochmann, Walter P. (Mil.), Waco.
Lattimore, John E., Waco.
Manske, A. O. (Mil.), Waco.
McCauley, E. R., Moody.
Milam, E. A., Waco.
Miller, Claire F. (Sec'y), Waco.
Montgomery, Hazel I., West.
Murphey, Paul C., Waco.
Nail, W. R., Waco.
Naylor, L. F., Waco.
Oliver, Tom M. (Mil.), Waco.
Power, Paul H., Waco.
Powell, Eugene V., Waco.
Reese, C. H., Waco.
Roddy, Louis H., Waco.
Sadler, Leslie R. (Mil.), Waco.
Scanio, Thos. J. (Mil.), West.
Shipp, W. R. F., Lorena.
Simpson, Neill (Mil.), Waco.
Smith, Carol C. (Mil.), Mart.
Smith, Edward, Waco.
Souther, Sam. L., Waco.
Spencer, Shelby C., Waco.
Stanislav, Frank J., Waco.
Tabb, T. E., Waco.
Thompson, John R., McGregor.
Traylor, Clayton J. (Mil.), Waco.
Trice, Wm. G., Waco.
Trippett, H. H. (Mil.), Waco.
Tyler, Russell E., Waco.
Warren, D. D. (Pres.), Waco.
Wells, W. Howard (Mil.), Waco.
Wermer, Paul (Mil.), Waco.
Witte, Wallace S., Waco.
Wood, W. A. (Hon.), Waco.
Wood, R. Spencer, Waco.
Woolsey, Fleta G., Waco.
Woolsey, Henry U., Waco.
Woolsey, W. Jinkens, Waco.

MILAM COUNTY MEDICAL SOCIETY

Avent, Woodrow M. (Mil.), Cameron.
Barkley, Thos. S., Rockdale.
Coulter, Hiram T., Rockdale.
Crump, Thos. E. (Sec'y), Cameron.
Denson, Thos. L. (Pres.), Cameron.
Epperson, Albert S., Houston.
Fontaine, William J., Cameron.
Hubert, Jone S., Cameron.
Johnson, Cullen D., Thorndale.
Newton, Wm. R., Jr., Cameron.
Poetter, Henry W. (Mil.), Cameron.
Reed, Roy G. (Mil.), Cameron.
Rischar, Eduard, Cameron.
Somer, Frank A., Cameron.
Swift, Clifford G., Cameron.

NAVARRO COUNTY MEDICAL SOCIETY

Bowmer, Otho C., Corsicana.
Burnett, Samuel H., Corsicana.
Carter, Will W., Corsicana.
Daniel, Jos. S., Corsicana.
Daniel, Richard L. (Mil.), Corsicana.
David, J. Wilson (Sec'y), Corsicana.
Hamill, Dan B. (Mil.), Corsicana.
Kelton, Leslie E., Corsicana.
Logsdon, Wm. K., Corsicana.
McClung, John E., Corsicana.
Miller, Dubart, Corsicana.
Miller, Will M., Corsicana.
Newton, Earl H. (Pres.), Corsicana.
Sanders, Gurley H., Kerns.
Shell, Wm. T., Jr., Corsicana.
Shell, Wm. T., Sr., Corsicana.
Sneed, Wm. R., Corsicana.
Stroud, S. C. (Mil.), Corsicana.
Wills, Thomas O., Corsicana.

THIRTEENTH OR NORTHWESTERN DISTRICT

Dr. O. B. Kiel, Wichita Falls, Councilor.

BAYLOR-KNOX-HASKELL COUNTIES MEDICAL SOCIETY

Balch, Edwin H., Seymour.
Barber, Lyman A., Seymour.
Bunkley, Eutus P., Stamford.
Bunkley, John F., Seymour.
Cadenhead, James F., Weinert.
Edwards, Thos. S., Knox City.
Eiland, David C., Munday.
Foy, James W., Seymour.
Frizzell, Thos. P., Knox City.
Heard, Eli F., Goree.
Hudson, Isaac F. (Mil.), Stamford.
Johnson, Chas. E., Seymour.
Kimbrough, Ernest M. (Mil.), Haskell.
Lowry, Robert K. (Pres.), Seymour.
Newsom, Robert L. (Sec'y), Munday.
Phillips, Gordon C. (Mil.), Haskell.
Rogers, Madison W., Rule.
Scott, Frank C., Haskell.
Smith, Arthur A., Munday.
Taylor, Lafayette F., Haskell.
Taylor, Wm. M., Goree.
Williams, Temple W., Haskell.
Youngblood, John W. (Mil.), Stamford.

CLAY-MONTAGUE-WISE COUNTIES MEDICAL SOCIETY

Carman, E. M., Vashti.
Darwin, J. T., Decatur.
Davis, W. W., Nocona.
Greer, Albert, Henrietta.
Harris, Ewing P. (Sec'y), Bowie.
Inabnett, W. T., Decatur.
Lawson, John T., Bowie.
Patton, F. M., Henrietta.
Riley, David C., Alvord.
Rogers, T. G., Decatur.
Russell, W. L., Rhome.
Watson, O. M., Jr., Bridgeport.
Wright, Elbert W. (Pres.), Bowie.
Buchanan, E. B., Nocona.

EASTLAND-CALLAHAN COUNTIES MEDICAL SOCIETY

Ball, D., Cisco.
Blackwell, Ed. C., Gorman.
Blackwell, Geo. T., Gorman.
Brazda, Adolph W. (Mil.), Ranger.
Brown, Lovell C. (Pres.), Eastland.
Carter, Chas. H., Texarkana.
Caton, James H., Eastland.
Clark, Floyd E., Cisco.
Dill, John R., Rising Star.
Graham, E. L., Cisco.
Isbell, F. T., Eastland.
Jackson, C. L. (Mil.), Ranger.
Jackson, Thos. G., Carbon.
Jackson, Walter L., Ranger.
Kuykendall, P. M., Ranger.
Powell, Eli., Cross Plains.
Rodgers, David V., Gorman.
Stubblefield, M. L. (Sec'y), Baird.
Stubblefield, R. L. (In.), St. Louis, Mo.
Weir, A. K., Ranger.

PALO PINTO-PARKER COUNTIES MEDICAL SOCIETY

Allen, Platt L. (Mil.), Weatherford.
Bruce, R. G. (Mil.), Mineral Wells.
Evans, Andrew J., Mineral Wells.
Lasater, Waldo B., Mineral Wells.
McCall, James D. (Mil.), Mineral Wells.
McCloud, Ben L. (Mil.), Graford.
McCracken, J. H., Mineral Wells.
Patterson, A. M., Mineral Wells.
Pedigo, Paul C., Strawn.
Pedigo, Wm. S., Strawn.
Roan, Leo N., Weatherford.
Roberson, John F., Gordon.
Rohrer, Wm. M., Springtown.
Russell, Earl M. (Sec'y), Weatherford.
Simmons, Phil R., Weatherford.
Smith, John E. (Pres.), Weatherford.
Smith, Robt. H., Palo Pinto.
Spratt, John T., Mingus.
Williams, Chas. B., Mineral Wells.
Williams, Chas. R. (Mil.), Mineral Wells.
Wright, Jas. B., Weatherford.
Yeager, Edward F., Mineral Wells.

STEPHENS-SHACKELFORD-THROCKMORTON COUNTIES MEDICAL SOCIETY

Berry, W. L., Throckmorton.
Cartwright, H. H. (Pres.), Breckenridge.
Forrester, R. E., Moran.
Guinn, W. B., Breckenridge.
Kessler, Calvin M., Odessa.
Murrie, R. G., Albany.
Parks, W. S., Breckenridge.
Payne, Frank C. (Mil.), Breckenridge.
Webb, W. T., Breckenridge.
Wood, G. C., Breckenridge.
Youngblood, D. J. R. (Sec'y), Breckenridge.

TARRANT COUNTY MEDICAL SOCIETY

Allen, Daisey E., Fort Worth.
Allison, J. A., Grapevine.
Allison, Wilmer L., Fort Worth.
Alspaugh, H. B., Duncan, Okla.
Althaus, J. W. A. (Mil.), Fort Worth.
Anderson, J. V., Fort Worth.
Anderson, R. B., Fort Worth.
Andujar, John J., Fort Worth.
Anthony, E. E., Fort Worth.
Anthony, F. H., Fort Worth.
Antweil, A., Fort Worth.
Armstrong, W. F., Fort Worth.
Axtell, E. C., Fort Worth.
Baker, R. G., Fort Worth.
Bailey, Noel R. (Mil.), Fort Worth.
Ball, Bert C., Fort Worth.
Ball, Chas. E., Fort Worth.
Barcus, J. R., Fort Worth.
Barcus, W. S., Fort Worth.
Barker, Robt. C. (Mil.), Fort Worth.
Barrett, I. P., Fort Worth.
Barrier, Chas. W., Fort Worth.
Barrow, Wm. B., Fort Worth.
Beall, Frank C., Fort Worth.
Beall, K. H., Fort Worth.
Beaton, Hugh, Fort Worth.
Beavers, G. H., Jr., Fort Worth.
Bennett, Jerrell, Fort Worth.
Black, Thos. W., Fort Worth.
Bobo, Zack, Jr., Arlington.
Bond, Tom B., Fort Worth.
Bonelli, V. E., Fort Worth.
Borough, L. D. (Mil.), Fort Worth.
Bowden, Andy J. (Mil.), Fort Worth.
Brasher, R. V. (Mil.), Fort Worth.
Braselton, C. W., Jr. (Mil.), Fort Worth.
Brewster, C. Burke (Mil.), Fort Worth.
Brown, Arthur, Fort Worth.
Brown, J. Hyal, Fort Worth.
Brown, W. Porter, Fort Worth.
Burgess, R. M., Fort Worth.
Bursey, E. H., Fort Worth.
Campbell, J. F., Fort Worth.
Carpenter, N. C., Fort Worth.
Cassidy, John M. (Mil.), Fort Worth.
Chambers, James O., Fort Worth.
Chilton, W. E., Fort Worth.
Chorn, E. H. (Mil.), Fort Worth.
Church, John M. (Mil.), Fort Worth.
Clayton, Chas. F., Fort Worth.
Cochran, J. R. (Mil.), Fort Worth.
Coffey, Alden, Fort Worth.
Cohn, Maurice H., Fort Worth.
Collins, J. D., Arlington.
Cook, W. G. (Hon.), Fort Worth.
Covert, J. D., Fort Worth.
Crabb, M. H., Fort Worth.
Crawford, Wm. M. (Mil.), Fort Worth.
Cross, T. J., Fort Worth.
Cummins, J. B., Fort Worth.
Cyrus, E. M., Jr. (Mil.), Fort Worth.
Daly, Jack E., Fort Worth.
Day, Giles W., Fort Worth.
Davis, J. Haywood (Mil.), Fort Worth.
Deaton, Hobart O., Fort Worth.
Ditto, H. Howard, Fort Worth.
Doss, Doyle J. (In.), Lubbock.
Doss, A. Keller, Fort Worth.
Douglass, Hal C., Fort Worth.
Dryden, Sam H. (Mil.), Fort Worth.
Dunn, Nelson L., Fort Worth.
Duringer, W. C., Fort Worth.
Emery, O. J., Fort Worth.
Enloe, G. R., Fort Worth.
Eschenbrenner, J. W. (Mil.), Fort Worth.
Farrington, N. C. (Mil.), Fort Worth.
Fershtand, J. B. (Mil.), Fort Worth.
Foster, W. C., Handley.
Francis, F. W., Fort Worth.
Funk, Theron H. (Mil.), Fort Worth.
Furman, Jack M., Jr., Fort Worth.
Furman, John M. (Dead), Fort Worth.
Garrett, C. C., Fort Worth.
Garnett, John W. (Mil.), Fort Worth.
Givens, J. M., Fort Worth.
Godley, L. O., Fort Worth.
Goldberg, A. I., Fort Worth.
Goldberg, Morton N. (Mil.), Fort Worth.
Goodman, T. L., Fort Worth.
Gough, R. H., Fort Worth.
Grammer, J. H. (Mil.), Fort Worth.
Grammer, R. B., Fort Worth.
Greines, Abe, Fort Worth.
Greve, Anna M., Fort Worth.
Grice, Thos. W., Fort Worth.
Griffin, Harold B. (Mil.), Fort Worth.
Griffith, M. A., Fort Worth.
Grogan, O. R., Fort Worth.
Grogan, R. L., Fort Worth.
Guerra, R. Lopez, Fort Worth.
Hahn, W. B. (Mil.), Fort Worth.
Hall, E. P., Jr. (Mil.), Fort Worth.
Hall, E. P., Fort Worth.
Hallmark, J. A. (Mil.), Fort Worth.
Hammack, John A., Kennedale.
Halpin, Frank W. (Mil.), Fort Worth.
Hancock, E. C., Arlington.
Harkins, T. A., Jr. (Mil.), Fort Worth.
Harper, H. W., Jr., Fort Worth.
Harris, Chas. H., Fort Worth.
Harris, C. H. II (Mil.), Fort Worth.
Harris, Earl, Fort Worth.
Hawker, L. J. (Mil.), Fort Worth.
Hawkins, C. P. (Mil.), Fort Worth.
Hayes, C. F., Fort Worth.
Helbing, H. V., Fort Worth.
Hewatt, J. W. (Mil.), Fort Worth.
Hiett, Carey, Fort Worth.
Hightower, L. P., Fort Worth.
Higgins, W. P., Jr. (Mil.), Fort Worth.
Hood, Grace H., Fort Worth.
Hook, J. H. (Mil.), Fort Worth.
Horn, J. Morris (Mil.), Fort Worth.
Horn, Will S., Fort Worth.
Howard, E. L., Fort Worth.
Howard, Rex J. (In.), Dallas.
Howard, Rex Z., Fort Worth.
Howell, Wm. L. (Mil.), Fort Worth.
Huffman, A. M., Fort Worth.
Hulsey, Sim (Mil.), Fort Worth.
Hyde, X. R. (Sec'y), Fort Worth.
Isaacks, Hub E. (Mil.), Fort Worth.
Jackson, A. E., Fort Worth.
Jackson, H. T., Fort Worth.
Jagoda, Samuel, Fort Worth.
Jenkins, W. N., Fort Worth.
Jeter, T. M., Fort Worth.
Johnson, James L. (Mil.), Fort Worth.
Kelley, J. A. (Hon.), Fort Worth.
Key, W. F. (Hon.), Fort Worth.
Kibbie, Horace, Fort Worth.
Kibbie, Kent V., Fort Worth.
Kingsbury, H. B., Fort Worth.
King, Gerald A., Fort Worth.
Kramer, J. T., Fort Worth.
Lace, W. T. (Mil.), Fort Worth.
Lacy, Geo. W. (Mil.), Fort Worth.
Lackey, W. C., Fort Worth.
Ladd, A. D., Fort Worth.
Lange, A. A., Fort Worth.
Lauderdale, T. L., Fort Worth.
Lawson, J. Mack, Fort Worth.
Lees, C. R., Fort Worth.
Lenox, W. R., Fort Worth.
Leon, Wm. R., Fort Worth.
Levy, Louis J. (Mil.), Fort Worth.
Littlepage, H. B., Fort Worth.
Lorimer, W. S., Fort Worth.
Lyle, Judge M., Fort Worth.
Major, A. D. (Mil.), Fort Worth.
Mallard, R. S., Fort Worth.
Marquart, Philip B. (Mil.), Fort Worth.
Matheson, D. N., Fort Worth.
McCarroll, M. C., Fort Worth.
McCollum, C. H., Jr. (Mil.), Fort Worth.
McDonald, Audrey J., Fort Worth.
McDonald, R. P. (Mil.), Fort Worth.
McKean, R. W., Fort Worth.
McKee, Frank, Fort Worth.
McKenzie, Walten H. (Mil.), Fort Worth.
McKissick, J. F., Arlington.
McKnight, W. B. (Hon.), Mansfield.
McKnight, Wm. Hodges, Fort Worth.
McLean, J. H., Fort Worth.
McVeigh, J. F., Fort Worth.
Mitchell, Gatlin (Mil.), Fort Worth.
Morris, A. J. (Mil.), Fort Worth.
Mulkey, Young J., Fort Worth.
Murchison, S. J. R., Fort Worth.
Myers, T. B. (Mil.), Fort Worth.
Needham, R. H., Fort Worth.
Neighbors, DeWitt, Fort Worth.
Nesbit, P. M., Arlington.
Nies, W. B., Fort Worth.
Nifong, Harry D., Mansfield.
O'Bannon, R. P., Fort Worth.
O'Reilly, J. J. (Mil.), Fort Worth.
Ott, W. O., Fort Worth.
Owen, May, Fort Worth.
Parsons, W. F. (Mil.), Fort Worth.
Perrine, Holmes E., Fort Worth.
Petta, Walter B. (Mil.), Fort Worth.
Phillips, O. M. (Mil.), Fort Worth.
Phillips, W. G., Fort Worth.
Ponton, A. R., Jr. (Mil.), Fort Worth.
Potts, John, Fort Worth.
Price, S. A. (Mil.), Fort Worth.
Pumphrey, A. B., Fort Worth.
Radtke, H. P., Fort Worth.
Rathgeber, Van D., Fort Worth.
Renshaw, Horace S. (Mil.), Fort Worth.
Reeves, L. H., Fort Worth.
Richardson, J. J., Fort Worth.
Roberts, A. D. (Mil.), Fort Worth.
Roberts, A. L., Fort Worth.
Roberts, Lily, Fort Worth.
Rogers, E. D., Fort Worth.
Rogers, R. L. Cromwell, Fort Worth.
Rumph, D. M., Fort Worth.
Rumph, Mal, Fort Worth.
Rumph, T. G., Fort Worth.
Sanders, Frank G., Fort Worth.
Saunders, R. F., Fort Worth.
Schenck, C. P., Fort Worth.
Schoolfield, E. C., Fort Worth.
Schoonover, Frank S., Fort Worth.
Scobee, R. G. (Mil.), Fort Worth.
Scroggie, Val D., Fort Worth.
Schwarz, E. G., Fort Worth.
Sewell, J. H., Fort Worth.
Sewell, Robt. L., Fort Worth.
Shaw, E. L., Fort Worth.
Sheddan, Frank G., Fort Worth.
Shelley, Harold J., Fort Worth.
Shilling, Harold C. (Mil.), Fort Worth.
Shoemaker, J. W., Fort Worth.
Siddons, Geo. Y. (Mil.), Fort Worth.
Simon, John, Jr. (In.), Fort Worth.
Smith, Wallace B., Fort Worth.
Snyder, F. L., Fort Worth.
Spencer, Robt. S. (Mil.), Fort Worth.
Stanfield, J. A. (Hon.), Fort Worth.
Steger, J. H. (Mil.), Fort Worth.
Stout, S. E., Fort Worth.
Stow, R. C., Jr. (Mil.), Fort Worth.
Sumner, W. W. (Mil.), Fort Worth.
Swift, W. B., Fort Worth.
Tadlock, M. E., Fort Worth.
Tatum, W. C., Fort Worth.
Taylor, Elizabeth A., Fort Worth.
Taylor, Holman, Fort Worth.
Taylor, Holman, Jr., (In.), Ann Arbor, Mich.
Teague, Wm. H., Fort Worth.
Terrell, C. O., Jr. (Mil.), Fort Worth.
Terrell, C. O., Fort Worth.
Terrell, T. C., Fort Worth.
Thomas, H. C., Fort Worth.
Thomason, T. H. (Pres.), Fort Worth.
Thomason, W. R. (Emer.), Fort Worth.
Tom, J. C., Jr., Fort Worth.
Touzel, C. S. E., Fort Worth.
Tottenham, J. W., Fort Worth.
Tottenham, J. W., Jr. (Mil.), Fort Worth.
Trigg, Henry B., Fort Worth.
Trigg, Ross, Fort Worth.
Tucker, J. T., Fort Worth.
Van Zandt, I. L., Fort Worth.
Walker, Webb, Fort Worth.
Waltrip, P. M., Jr. (Mil.), Fort Worth.
Webb, Wm. S., Fort Worth.
Wells, Cora V., Rogers.
West, W. B. (Mil.), Fort Worth.
White, R. J., Fort Worth.
Wier, E. M., Fort Worth.
Wiggins, John A., Jr., Fort Worth.
Williams, Harold M., Fort Worth.
Wise, J. R., Fort Worth.
Wolford, R. B., Fort Worth.
Woodward, C. S., Arlington.
Woodward, M. Lee (Hon.), Deming, N. M.
Woodward, Valin R., Arlington.
Wooten, J. H. (Mil.), Fort Worth.
Worden, R. W. (Mil.), Fort Worth.
Wright, J. Walker, Fort Worth.
Wyss, Herbert E., Keller.

TAYLOR-JONES COUNTIES MEDICAL SOCIETY

Adams, C. E. (Mil.), Abilene.
Adamson, W. B. (Mil.), Abilene.
Alexander, James M., Abilene.
Bailey, S. W. (Mil.), Abilene.
Bass, T. B., Abilene.
Beckman, M. A., Abilene.
Boehning, Harold H., Abilene.
Boyd, Virginia H., Abilene.
Bridges, James P., Abilene.
Burditt, J. N., Abilene.

Cash, W. Auda V., Abilene.
Cockerell, E. R. (Mil.), Abilene.
Crow, Jack A. (Sec'y) Abilene.
Curb, Delos G. (Mil.), Albany.
Duff, J. C., Anson.
Estes, J. M. (Mil.), Abilene.
Estes, Sol B., Abilene.
Freeman, Edwin S., Abilene.
Gardner, Chester B., Merkel.
Gibson, John P. (Mil.), Abilene.
Gray, Geo. A. (Mil.), Abilene.
Grubbs, L. F., Abilene.
Hedrick, T. Wade, Abilene.
Hollis, L. W., Jr., Abilene.
Hollis, Scott, Abilene.
Hodges, Frank C. (Mil.), Abilene.
Hudson, F. E., Stamford.
Johnson, L. F., Abilene.
Kirkpatrick, R. B., Abilene.
Little, O. W., Abilene.
Magee, J. D., Jr. (Mil.), Abilene.
Mathews, W. J., Abilene.
McCreight, Wm. J., Anson.
McDonald, Donald H. (Mil.), Stamford.
McFadden, C. A. (Mil.), Abilene.
McNeil, Melba, Abilene.
Metz, L. F., Stamford.
Middleton, E. E. (Mil.), Abilene.
Pattillo, Guy L. (Mil.), Abilene.
Pickard, L. J. (Pres.), Abilene.
Prichard, C. L., Abilene.
Pope, A. J., Abilene.
Ramsey, Wayne V., Abilene.
Rhodes, Ben F., Abilene.
Sadler, Wm. T., Merkel.
Seale, Wm. Hubert (Mil.), Abilene.
Sellers, Erle D., Abilene.
Shearer, T. Palmer (Mil.), Abilene.
Snow, William R., Abilene.
Southard, Dallas, Stamford.
Swan, Henry A., Abilene.
Thurman, Geo. D., Abilene.
Tull, Raymond H., Abilene.
Varner, R. W. (Mil.), Abilene.
Williams, Chas. F., Abilene.
Williams, W. H. (Mil.), Abilene.
Whiting, Edward T. (Mil.), Abilene.
Zehnpfennig, Urban H. (Mil.), Merkel.

WICHITA COUNTY MEDICAL SOCIETY

Adams, Walter B., Jr. (Mil.), Wichita Falls.
Adams, Walter B., Sr., Wichita Falls.
Arrington, John A. (Mil.), Wichita Falls.
Atkinson, Curtis, Wichita Falls.
Bailey, Edward B., Wichita Falls.
Bishop, Wm. A., Jr. (Mil.), Wichita Falls.
Brown, Chas. H. (Mil.), Wichita Falls.
Carpenter, Philip A., Burkburnett.
Caskey, Marion W., Wichita Falls.
Clark, Gordon G., Iowa Park.
Collard, Felix R., Wichita Falls.
Collins, Bailey R. (Pres.), Wichita Falls.
Collins, Robert P. (Mil.), Wichita Falls.
Cramer, Samuel E. (Hon.), Electra.
Crump, William E., Wichita Falls.
Daily, Robt. L. (Mil.), Wichita Falls.
Dorbandt, Barton W., Wichita Falls.
Egdorf, Otto C., Wichita Falls.
Fish, Pascal E., Electra.
Frey, Conrad, Wichita Falls.
Glover, Leonard A., Wichita Falls.
Glover, Milton H., Wichita Falls.
Guest, James C. A., Wichita Falls.
Hall, Joseph D., Wichita Falls.
Hargrave, Robt. L., Jr. (Mil.), Wichita Falls.
Hargrave, Robt. L., Sr. (Hon.), Wichita Falls.
Harper, John W., Jr., Wichita Falls.
Harrison, Wm. G., Jr., Wichita Falls.
Hartsook, Chas. R., Wichita Falls.
Heymann, Julius A., Wichita Falls.
Holland, Louis B., Wichita Falls.
Howser, John P., Wichita Falls.
Janzen, Arnold H. (Mil.), Wichita Falls.
Johnson, James A., Wichita Falls.
Kanatser, Jos E., Wichita Falls.
Kiel, Oliver B., Wichita Falls.
Kimbrough, Orman T., Wichita Falls.
Knox, Roland F., Wichita Falls.
Landon, Fred R., Wichita Falls.
Leach, Austin F., Wichita Falls.
Ledbetter, Wm. Harry (Sec'y), Wichita Falls.
Ledford, Henry P., Wichita Falls.
Lee, Quincy B., Wichita Falls.
Little, James A., Wichita Falls.
Little, Raymond D. (Mil.), Wichita Falls.
Lowry, William P., Wichita Falls.
Lynch, Thomas C., Wichita Falls.
Manar, Roger W., Wichita Falls.
Mangum, Carl E., Wichita Falls.
Mast, John R. (Mil.), Wichita Falls.
McConchie, Richard D. (Mil.), Wichita Falls.
McFatridge, Keith W. (Mil.), Wichita Falls.
Meredith, Duane, Wichita Falls.
Monroe, Chas. W., Electra.
Nail, James B., Wichita Falls.
Nelson, Richard L., Wichita Falls.
Ogden, William H., Electra.
Parker, William L., Wichita Falls.
Parmley, Tim H., Electra.
Parnell, Luther D., Wichita Falls.
Peters, James I., Wichita Falls.
Pierce, Alex. W. (Mil.), Wichita Falls.
Powers, Wm. L. (Mil.), Wichita Falls.
Prichard, Horace D., Wichita Falls.
Reagan, John R., Wichita Falls.
Robertson, David L. (Mil.), Wichita Falls.
Rosenblatt, Wm. (Mil.), Wichita Falls.
Rundell, Wm. K., Wichita Falls.
Russell, Isaac D., Burkburnett.
Seay, Jos. A., Wichita Falls.
Seibold, Geo. J. (Mil.), Wichita Falls.
Smith, M. Z. (Mil.), Wichita Falls.
Smith, Percy K., Wichita Falls.
Stripling, Louis F., Wichita Falls.
Sullivan, Harley C., Burkburnett.
Whiting, Walter B., Wichita Falls.
Wilcox, Clark A., Wichita Falls.
Wilson, Oscar W., Wichita Falls.
Zeldes, Mary, Wichita Falls.

WILBARGER COUNTY MEDICAL SOCIETY

Borchardt, Alvin L., Vernon.
Coleman, Wm. C. (Pres.), Vernon.
Hollar, Emory D. (Sec'y), Vernon.
Miller, Bradford W., Vernon.
Moore, Wm. R., Vernon.
Rogers, Albert C., Vernon.
Shipman, Joe, Vernon.
Shipman, Virginia, Vernon.

YOUNG-JACK-ARCHER COUNTIES MEDICAL SOCIETY

Conner, Paul K., Jacksboro.
Devine, Blaine, Graham.
Edwards, B. F. (Mil.), Graham.
Fillmore, R. S. (Mil.), Jacksboro.
Griffin, B. B., Graham.
Griffin, H. E., Graham.
Harrell, Fred S. (Mil.), Marfa.
Lovett, J. P. (Mil.), Olney.
Lovett, R. E. (Mil.), Olney.
McClure, C. C., Jacksboro.
McKinney, H. C., Olney.
Meredith, E. Filmore (Sec'y), Olney.
Oates, K. D., Graham.
Padgett, Harold O. (Mil.), Graham.
Padgett, W. O., Graham.
Rosser, Virgil O., Jr., Graham.
Winstead, D. Edgar (Mil.), Graham.
Woods, David R. (Pres.), Olney.

FOURTEENTH OR NORTHERN DISTRICT

Dr. C. C. Nash, Dallas, Councilor.

COLLIN COUNTY MEDICAL SOCIETY

Burton, E. L., McKinney.
Corry, A. C., Farmersville.
Erwin, J. C., Jr., McKinney.
Mitchell, Oliver T., Plano.
Morrow, R. E., McKinney (R. F. D. 2).
Saye, W. L., Frisco.
Shumway, Chas. M., McKinney.
Wright, Will C., Farmersville.
Wysong, C. E. (Mil.), McKinney.
Wysong, H. Dudley, McKinney.
Wysong, W. Scott (Sec'y), McKinney.
Wysong, W. S., Jr., McKinney.

COOKE COUNTY MEDICAL SOCIETY

Atchison, James W., Gainesville.
Cunningham, Ernest S. (Mil.), Gainesville.
Hardy, John M. (Mil.), Gainesville.
Hawk, H. Patterson (Mil.), Gainesville.
Maxwell, Hal W. (Mil.), Myra.
Mead, Ernest C., Gainesville.
Myrick, Thos. S., Muenster.
Rice, Lee Roy (Mil.), Gainesville.
Terry, Houston H. (Sec'y), Gainesville.
Thayer, Claud B., Gainesville.
Thomas, Ira L., Gainesville.
Whiddon, Rufus C., Gainesville.
Yarbrough, Silas M. (Pres.), Gainesville.

DALLAS COUNTY MEDICAL SOCIETY

Abramson, Jno. H. (Mil.), Dallas.
Addison, R. P., Dallas.
Alessandra, S. A. (Mil.), Dallas.
Alexander, Jo C., Dallas.
Alexander, Lee J., Dallas.
Alfieri, Anthony L. (Mil.), Dallas.
Allday, Louie E. (Mil.), Dallas.
Allen, Burton W., Dallas.
Allen, Ruth I., Dallas.
Allison, Wilfred J. (Mil.), Dallas.
Altman, Wm. A., Dallas.
Anderson, L. R., Dallas.
Andres, Reubin (In.), Washington, D. C.
Andrew, Warren, Dallas.
Andrews, B. C., Dallas.
Arnold, Geo. K. (Mil.), Dallas.
Arnold, Lawrence E., Dallas.
Aronoff, B. L., Boston, Mass.
Aronson, H. S., Dallas.
Ashby, Jno. E., Dallas.
Ashworth, Chas. T., Dallas.
Aten, Eugene L. (Mil.), Dallas.
Atkinson, Geo. N., Jr. (Mil.), Dallas.
Ault, C. A. (Mil.), Dallas.
Austin, D. J. (Mil.), Dallas.
Austin, Florence W., Dallas.
Austin, Frank H., Dallas.
Austin, Ona Mae R., Dallas.
Bagwell, John S. (Mil.), Dallas.
Baird, Sidney S., Dallas.
Baker, Bryant O., Dallas.
Baker, John O., Dallas.
Baldwin, Alvin, Jr., Dallas.
Barnes, Dorsey K., Dallas.
Barr, Wm. T., Dallas.
Barta, C. K. (Mil.), Dallas.
Barton, Robt. M., Dallas.
Bass, Jas. W. (Mil.), Dallas.
Beall, John R., Dallas.
Beaver, N. B. (Mil.), Dallas.
Beckering, Henry H., Dallas.
Beddoe, Robt. E., Galveston.
Beddow, L. D. (Mil.), Dallas.
Bell, Marvin D., Dallas.
Bellamy, C. H., Dallas.
Berger, B. J., Dallas.
Berk, Ira J., Dallas.
Berk, Wm. R., Dallas.
Black, J. H., Dallas.
Bland, Leonard F., Dallas.
Blend, Max H. (Mil.), Dallas.
Block, Cecil C., Dallas.
Block, Harold M. (Mil.), Dallas.
Board, J. Paul, Dallas.
Boone, M. A., Dallas.
Bounds, Murphy (Mil.), Dallas.
Bourland, John B., Dallas.
Bourland, J. W., Dallas.
Bourland, J. W., Jr., Dallas.
Bowyer, Mack F. (Mil.), Dallas.
Bowyer, L. A., Dallas.
Bradfield, Jno. L., Dallas.
Bradford, Wm. H., Dallas.
Bralley, Ernest M., Jr. (In.), Dallas.
Brandt, Otto Jr. (Mil.), Dallas.
Brannin, Dan, Dallas.
Brannin, E. B., Dallas.
Brau, Jno G. (Mil.), Dallas.
Breihan, E. W., Dallas.
Brereton, G. E. (Pres.), Dallas.
Brooks, Ernest J., Dallas.
Brooksaler, Fred S., Dallas.
Brown, C. Frank, Dallas.
Brown, Olen E., Dallas.
Brown, S. Roland (Mil.), Dallas.
Browne, Wm. C., Dallas.
Burton, Emmett B., Dallas.
Bryan, Eugene K. (Mil.), Dallas.
Bryant, David W. (In.), Kansas City, Mo.
Buchanan, J. Forest, Dallas.
Buckner, Kathryn, Dallas.
Buford, Ben R., Dallas.
Bumpass, Stewart R., Dallas.
Burgess, Geo. A. (Mil.), Dallas.
Bush, Douglas M. (Mil.), Dallas.
Bush, W. H. (Mil.), Dallas.
Bussey, C. D. (Mil.), Dallas.
Butte, Felix L. (Mil.), Dallas.
Byron, Emmett T., Dallas.
Bywaters, T. W., Dallas.
Caillet, O. Rene, Dallas.
Cairns, A. B. (Mil.), Dallas.
Caldwell, Geo. T., Dallas.
Caldwell, Janet A., Dallas.
Calhoun, Nina Fay, Dallas.
Calhoun, Thos. J., Dallas.
Cantrell, Roy H. (Mil.), Dallas.
Carlisle, Chas. P., Dallas.
Carlisle, Geo. L., Dallas.
Carlson, Glenn D. (Mil.), Dallas.
Carmen, H. Frank, Dallas.
Carpenter, Robt. G., Dallas.
Carrell, Brandon W., Dallas.
Carroll, Benj. H., Dallas.
Carswell, Winston E. (Mil.), Dallas.
Carter, C. B. (Mil.), Dallas.

COLLEGE OF PHYSICIANS OF PHILADELPHIA

Carter, Chas. F., Dallas.
Carter, David W., Jr., Dallas.
Carter, Earl L., Dallas.
Cary, Ed. H., Dallas.
Chapman, Jno. S., Dallas.
Cinnamon, Alfred M.. Dallas.
Clark, Arthur L. (Mil.), Dallas.
Clark, Harold G., Dallas.
Cochran, H. Walton, Dallas.
Cochran, Leroy M. (Mil.), Dallas.
Coggeshall, Howard C. (Mil.), Dallas.
Collier, Gates (Mil.), Dallas.
Cook, Thos. E., Dallas.
Cookerly, Van (Mil.), Dallas.
Copeland, F. R., Dallas.
Copeland, H. V., Grand Prairie.
Cowart, Robt. W., Dallas.
Cox, Eli R., Dallas.
Cox, Kelly, Dallas.
Crow, W. E., Dallas.
Crutcher, Howard, Dallas.
Cupp, Chas. D., Grand Prairie.
Daniel, Ruby K., Dallas.
Darrough, L. E. (Mil.), Dallas.
Dathe, Richard Z. (Mil.), Dallas.
Davidson, G. A., Dallas.
Davis, David B., Dallas.
Davis, J. Spencer, Dallas.
Davis, Leo G. (Mil.), Dallas.
Dawson, J. L., Dallas.
Deatherage, W. R. (Mil.), Dallas.
DeHaro, Anthony J. (Mil.), Dallas.
Denton, Guy T, Sr., Dallas.
Denton, Guy T. Jr. (Mil.), Dallas.
D'Errico, Albert P., Dallas.
Devereaux, W. P. (Mil.), Dallas.
Donald, Homer, Dallas.
Donnelly, Allen D., Grand Prairie.
Donoho, Chas. P. (Mil.), Dallas.
Doolittle, H. M., Dallas.
Dorman, J. H., Dallas.
Dowis, J. M., Dallas.
Downs, Jas. T., Dallas.
Dozier, F. S. (Mil.), Dallas.
Driver, John B., Dallas.
Driver, Sim, Dallas.
Duckett, J. W., Dallas.
Duncan, Chas. N. (Mil.), Dallas.
Duncan, Horace E. (Mil.), Dallas.
Dunlap, Elbert, Dallas.
Dunlap, J. Hudson (Mil.), Dallas.
Dunlap, John E., Dallas.
Dunstan, E. M. (Mil.), Dallas.
DuPuy, Howard B., Dallas.
Edwards, Wm. L., Dallas.
Embree, Jno. W., Dallas.
Estes, Ivan A., Dallas.
Evans, Allan C. (In.), Dallas.
Evans, Edward L., Dallas.
Evans, W. G., Dallas.
Fashena, Gladys J., Dallas.
Ferguson, Doyle W., Dallas.
Fetzer, Lewis W., Dallas.
Finnegan, Chas. R., Dallas.
Fisher, Rowan E. (Mil.), Dallas.
Fisher, Thos. B., Dallas.
Folsom, A. I., Dallas.
Fowler, W. W. (Sec'y), Dallas.
Fox, Everett C. (Mil.), Dallas.
Franklin, Floyd S., Dallas.
Franklow, C. D., Dallas.
Freedman, S. M., Dallas.
French, Cecil M. (Mil.), Dallas.
Fry, Elma May, Dallas.
Fry, Murdock D., Dallas.
Fuller, Wm. W., Dallas.
Fuqua, Carl F. (In.) Dallas.
Galt, Sidney (Mil.), Dallas.
Garrett, H. Grady, Dallas.
Garrett, William J. (In.), Dallas.
Gendel, Joseph (Mil.), Dallas.
George, Ella Mary, Dallas.
Gessner, F. E., Dallas.
Gibbons, Olin W., Dallas.
Gilbert, Allen C. (Mil.), Dallas.
Gilbert, Taylor C., Dallas.
Giles, Robt. B., Dallas.
Gill, Atticus J., Dallas.
Gill, Horace E. (Mil.), Dallas.
Girard, Percy M. (Mil.), Dallas.
Goff, Gomer F., Dallas.
Goforth, John L., Dallas.
Goggans, Roy F., Dallas.
Goode, John V., Dallas.
Gordon, E. S., Dallas.
Gottlich, Arthur P., Dallas.
Grafton, Edwin G., Jr. (Mil.), Dallas.
Green, Falvey R., Dallas.
Green, Tim, Dallas.
Griffin, Ben H., Dallas.
Grollman, Arthur, Dallas.
Grow, Max H. (Mil.), Dallas.
Guerriero, Wm. F., Dallas.
Hacker, Guy L., Dallas.
Hackney, U. P., Dallas.
Halbouty, M. R. (Mil.), Dallas.
Hale, Martha Helen, Dallas.
Haley, Wm. E., Dallas.
Halpern, Salmon R. (Mil.), Dallas.
Hampton, J. A., Dallas.
Harber, Harry P., Dallas.
Hardin, Hal White (Mil.), Dallas.
Hardin, Dexter H., Dallas.
Harkins, James E. (Mil.), Dallas.
Harrington, Francis T., Dallas.
Harrington, S. F., Dallas.
Harris, Alfred W., Dallas.
Harris, N. J. (Mil.), Dallas.
Harrison, Ben F., Jr., Dallas.
Harrison, Gaston G., Dallas.
Harrison, Tinsley R., Dallas.
Hart, G. A., (Mil.), Dallas.
Hartman, James M., Garland.
Harvill, T. Haynes (Mil.), Dallas.
Hawkins, Hubert F., Dallas.
Hawley, J. Leeper, Dallas.
Hellems, Alfred A. (Mil.), Dallas.
Henderson, W. T., Jr. (Mil.), Dallas.
Henry, D. J. (Mil.), Dallas.
Herndon, James H. (Mil.), Dallas.
Herndon, Jesse H., Paris.
Hill, Joseph M., Dallas.
Hill, S. M., Dallas.
Hilliard, Geo. M., Jr. (Mil.), Dallas.
Hodges, J. Shirley, Dallas.
Hodges, Leon, Dallas.
Hoefer, Carl A., Dallas.
Holt, J. O. S., Jr. (Mil.), Dallas.
Hood, Marianna, Dallas.
Hopkins, May Agnes, Dallas.
Horn, Fred W., Grand Prairie.
Howard, Geo. W., Dallas.
Howell, Jas. B., Dallas.
Hudgins, B. E., Hutchins.
Hudson, W. Lee, Dallas.
Hurt, L. B. (Mil.), Dallas.
Hutchison, Elizabeth S., Dallas.
Irvine, Eugene J., Dallas.
Jablow, Harry B., Dallas.
Jackson, Reuben W., Dallas.
Jackson, Rice R., Dallas.
Jackson, Mary Ruth, Dallas.
Jacobson, Harry B., Dallas.
Jamison, Cyrus W., Dallas.
Jayson, Arthur V. (In.), New York.
Jenkins, John L., Dallas.
Jenkins, Speight, Dallas.
Jewell, Geo. W., Jr. (In.), Dallas.
Jones, Geo. M., Dallas.
Jones, J. Guy, Dallas.
Jones, W. D., Dallas.
Kahn, S. H., Dallas.
Kaplan, Harry L. (In.), Galveston.
Katz, S. M. (Mil.), Dallas.
Keller, L. L., Dallas.
Kelley, Chas. W., Dallas.
Kelly, Thos. E., Dallas.
Kemp, Hardy A. (Mil.), Dallas.
Kemper, Thos. W. (In.), Tulsa, Okla.
Kerr, Jack G., Dallas.
Kidd, Frank H., Jr. (Mil.), Dallas.
Kilgore, Donald G., Dallas.
Kindley, Geo. C., Dallas.
King, Karl B. (Mil.), Dallas.
Kirksey, Thos. M., Dallas.
Knickerbocker, B. A. (Mil.), Dallas.
Knowles, W. Mood. Dallas.
Knox, Robt. A., Dallas.
Kreymer, Geo. C., Dallas.
LaDue, Chas. N. (Mil.), Dallas.
Lancaster, Mary Agnes, Dallas.
Lanius, John W. (Mil.), Dallas.
Laugenour, Dudley P., Dallas.
Launey, Geo. V., Dallas.
Lawson, Geo. W., Dallas.
Lee, Jack B. (Mil.), Dallas.
Lee, Ridings E. (Mil.), Dallas.
Leeper, Edward P. (Mil.), Dallas.
Levin, Paul M., Dallas.
Levy, Harry R., Dallas.
Light, Flominda, Dallas.
Lindsay, G. A., Dallas.
Lipscomb, Joe L. (In.), Dallas.
Littell, Geo. S. (Mil.), Dallas.
Lively, Wm. M., Jr. (Mil.), Dallas.
LoBello, Leon C. (Mil.), Dallas.
Loftis, Earl L., (Mil.), Dallas.
Long, Gerald Dewitt, Dallas.
Long, Troy F., Dallas.
Loomis, Edgar W., Dallas.
Looney, W. W., Dallas.
Love, Thos. S., Dallas.
Loveless, Roy G., Dallas.
Lubben, John F. (Mil.), Dallas.
Luecke, P. E., Dallas.
Lyday, Victor I. (Mil.), Dallas.
Lyon, Edward G., Dallas.
Maddox, W. Gordon, Dallas.
Maffett, Minnie L., Dallas.
Mahon, G. D., Dallas.
Marchman, Oscar M., Dallas.
Marshall, Jas. H., Dallas.
Martin, Chas. L., Dallas.
Martin, Jas. M., Dallas.
Martin, W. E., Dallas.
Martinak, Richard E. (Mil.), Dallas.
Mason, Porter K. (Mil.), Dallas.
Massey, Warren E., Dallas.
Mathews, Paul W., Dallas.
Maupin, W. A., Rowlett.
Maxfield, Geo. S. (Mil.), Dallas.
Maxfield, James R., Sr., Dallas.
Maxfield, Jas. R., Jr., Dallas.
Mazer, Morton L., Dallas.
McBride, Dayton C., Dallas.
McBride, R. B., Dallas.
McCallum, Chas., Mesquite.
McClung, Hugh L. (Mil.), Dallas.
McCracken, J. H., Jr., Dallas.
McCullough, Malcolm K., Dallas.
McDonald, W. D., Dallas.
McFarland, Gordon B., Dallas.
McGuire, Jos. H., Dallas.
McIver, Julius, Dallas.
McLaurin, Hugh L. (Mil.), Dallas.
McLaurin, John G., Dallas.
McLeod, James N., Dallas.
McNeill, Arch J., Dallas.
McPherson, V. L., Dallas.
Mendel, E. B., Dallas.
Mendenhall, Elliott, Dallas.
Mengert, Wm. F., Dallas.
Metz, M. Hill, Washington, D. C.
Miller, Tate (Mil.), Dallas.
Mikulencak, Ben A. (Mil.), Dallas.
Milliken, Sam E., Dallas.
Mills, James T. (Mil.), Dallas.
Minnett, Jno. S. (Mil.), Dallas.
Mitchell, Jos. D., Jr., Dallas.
Montgomery, Henry G., Dallas.
Moody, Joe Vern, Dallas.
Mooney, Ken (Mil.), Dallas.
Moore, Stephen H. (Mil.), Dallas.
Moore, H. Leslie, Dallas.
Moore, Ramsay H., Dallas.
Moore, Robt. L. (Mil.), Dallas.
Morris, A. Truett (Mil.), Dallas.
Morris, Julian H., Dallas.
Muirhead, E. E. (Mil.), Dallas.
Muirhead, Sam J. (Mil.), Garland.
Murphy, Jos. B. (Mil.), Dallas.
Myers, David V., Dallas.
Nash, C. C., Dallas.
Nelson, Harry E., Dallas.
Nelson, L. A., Dallas.
Nesbit, Harold T., Dallas.
Nesbitt, Irene T., Dallas.
Neuman, Albert, Dallas.
Newsom, Asa A., Dallas.
Newton, Cosette F., Dallas.
Newton, Frank H., Dallas.
Nichols, Ace E., Dallas.
Nichols, Carl, Gladewater.
Nitsche, Ernest W., Dallas.
Nordenbrock, Gregory J., Dallas.
Norman, Floyd A. (Mil.), Dallas.
Nowakovsky, Sophie T., Toledo.
O'Brien, H. A., Dallas.
O'Brien, J. D., Dallas.
Ormsby, F. E., Dallas.
Pace, John M., Dallas.
Park, Barton E. (Mil.), Dallas.
Parks, Harold D. (Mil.), Dallas.
Passamonte, Jane A., Dallas.
Paternostro, Chas. J., Dallas.
Patterson, Casey E. (Mil.), Dallas.
Patterson, Cecil O., Dallas.
Payne, Virgil M., Jr. (Mil.), Dallas.
Pelphrey, Chas. F. (In.), Dallas.
Pence, Ludlow M. (Mil.), Dallas.
Perkins, Jack F., Dallas.
Peyton, John B. (Mil.), Dallas.
Pickard, J. M., Dallas.
Pickett, Taylor T., Dallas.
Pickett, Walter F. (Mil.), Dallas.
Pierce, Jas. L., Jr., Dallas.
Porter, Geo. L. (Mil.), Dallas.
Potts, J. M., Dallas.
Potts, W. H., Jr., Dallas.
Powell, Homer (Mil.), Dallas.
Price, Harry S., Dallas.
Provence, Sally Ann, Dallas.
Quinn, Lester H., Dallas.
Ray, Jas. H., Dallas.
Ramsdell, Robt. L., Austin.
Rattan, Paul M., Dallas.

Reagan, A. Morris, Dallas.
Reaves, L. M. (Mil.), Dallas.
Reddick, Walter G. (Mil.), Dallas.
Reuss, G. T., Dallas.
Richter, Paul A., Dallas.
Riddle, Penn, Dallas.
Riddler, G. A., Dallas.
Riley, Jos. G., Dallas.
Rippy, Edwin L. (Mil.), Dallas.
Robertson, Geo. W. (Mil.), Dallas.
Robertson, Jas. E., Dallas.
Robinson, Wayne T., Dallas.
Rockett, Fred W. B., Dallas.
Rogers, Fred T., Dallas.
Rogers, Paul A., Dallas.
Rosenthal, R. S., Dallas.
Ross, Ed. S. (Mil.), Dallas.
Rosser, Curtice, Dallas.
Rouse, Milford O., Dallas.
Rowe, J. F., Dallas.
Rucker, John C. (Mil.), Dallas.
Rumpf, Wm. H., Dallas.
Rushing, E. O., Dallas.
Sacher, Clarence B., Dallas.
Salmond, Paul H., Dallas.
Sams, Lewis C., Dallas.
Sanders, Oscar P., Dallas.
Scales, John G. (Mil.), Dallas.
Scanland, Viola P., Dallas.
Schaefers, Jos. G., Jr., Dallas.
Schenewerk, Geo. A. (Mil.), Dallas.
Schoch, Arthur G., Dallas.
Schoolfield, Ben L., Dallas.
Schreiber, Gus, Jr., Dallas.
Schuessler, W. W. (Mil.), Dallas.
Schuett, Albert J., Dallas.
Schwenkenberg, A. J., Dallas.
Sebastian, F. J. (Mil.), Dallas.
Seeds, Asa E., Dallas.
Seely, Marcus S., Dallas.
Selecman, Frank A., Dallas.
Sellers, Lyle M., Dallas.
Sensenbach, C. W., Dallas.
Shane, J. Howard, Dallas.
Shannon, Hall, Dallas.
Shaw, Robt. R. (Mil.), Dallas.
Shea, Genevieve C., Dallas.
Sheffield, Lloyd D., Dallas.
Shelburne, S. A. (Mil.), Dallas.
Sheldon, Lawrence B., Dallas.
Shelmire, J. Bedford, Dallas.
Shelton, A. M., Dallas.
Shoecraft, Warren A., Dallas.
Short, Robt. F. (Mil.), Dallas.
Shortal, W. W., Dallas.
Shuey, Chas. B., Dallas.
Sigel, Zundel, Dallas.
Simpson, Jas. A., Dallas.
Singleton, J. D., Dallas.
Skrivanek, E. J. (Mil.), Dallas.
Slaughter, Donald H., Dallas.
Small, Andrew B. (Mil.), Dallas.
Smith, Chas. L. (In.), Washington.
Smith, Lois Weir (Mil.), Dallas.
Smith, Ralph C. (Mil.), Dallas.
Smith, Richard M., Dallas.
Smith, Thos. E. (Mil.), Dallas.
Smith, Vinney L., Dallas.
Smith, W. Edgar, Dallas.
Sorrells, C. C., Dallas.
Sowers, Harry B., Dallas.
Spangler, Davis, Dallas.
Spence, Harry M. (Mil.), Dallas.
Stanley, Ed. S. (Mil.), Dallas.
Stein, Justin J. (Mil.), Dallas.
Stell, Cecil I. (Mil.), Dallas.
Stephenson, James H., Dallas.
Stephenson, W. O., Dallas.
Stiles, J. C., Dallas.
Stiles, Wendel A. (Mil.), Dallas.
Still, Oscar W. (Mil.), Dallas.
Stokes, Elmer M. (In.), Dallas.
Stone, M. P., Dallas.
Strother, E. B., Dallas.
Strother, W. K., Dallas.
Stuart, Samuel E. (Mil.), Dallas.
Super, A. R., Dallas.
Sutton, C. R., Jr. (In.), Dallas.
Sweeney, J. Shirley (Mil.), Dallas.
Sykes, Walter M., Dallas.
Sypert, J. R., Dallas.
Taber, Martin E., Dallas.
Talkington, P. C. (Mil.), Dallas.
Taylor, Harold E., Dallas.
Terrell, Alex W., Jr., Dallas.
Terrill, James J., Dallas.
Thomas, W. Maxwell (Mil.), Dallas.
Thomas, Paul Jasper, Dallas.
Thomasson, Arthur R., Sr., Dallas.
Thomasson, Arthur R., Jr., Dallas.
Thompson, B. M., Irving.
Thompson, L. S., Dallas.
Thornton, C. W., Dallas.
Tigertt, Wm. D. (Mil.), Dallas.
Tittle, Guy A., Dallas.
Tittle, Lloyd C., Dallas.
Tobolowsky, Nathan (Mil.), Dallas.
Tomkies, Jas. S., Dallas.
Touchstone, Jay L., Dallas.
Truett, Chas. B. (Mil.), Dallas.
Trumbull, R. A. (Mil.), Dallas.
Tsukahara, Wm., Dallas.
Tubb, C. L., Dallas.
Underwood, Geo. M., Dallas.
Usry, R. S., Dallas.
Van Duzen, Rex E., Dallas.
Vassallo, A. L. (Mil.), Dallas.
Waddell, Otto J., Dallas.
Walborn, K. B. (Mil.), Dallas.
Waldman, Morris F., Dallas.
Walker, Horace G. (Mil.), Dallas.
Walker, Price M., Santa Monica, Calif.
Wallace, Gordon K., Dallas.
Ward, Ernest (Mil.), Dallas.
Warren, Chas. H., Dallas.
Wasserman, Eugene, Dallas.
Watkins, A. B., Seagoville.
Watkins, Dale V. (Mil.), Dallas.
Watkins, Margaret, Dallas.
Watson, Claud E., Dallas.
Weaver, S. D., Dallas.
Webb, Robt. W. (Mil.), Dallas.
Welch, Mark Lane (In.), Little Rock, Ark.
Wells, Jas. T., Dallas.
West, Ann, Dallas.
White, Byrd E., Jr. (Mil.), Dallas.
White, C. V., Dallas.
White, Edward, Dallas.
Whitis, Rufus, Dallas.
Whitten, Merritt B., Dallas.
Wilkinson, Wallace B., Dallas.
Williams, Edw. C. (Mil.), Dallas.
Williams, G. R., Dallas.
Williams, Paul C., Dallas.
Williams, Thos. S., Dallas.
Willis, R. S. (Mil.), Dallas.
Winans, Henry M. (Mil.), Dallas.
Winborn, Claude D. (Mil.), Dallas.
Winford, T. E., Dallas.
Winn, Robt. E. (Mil.), Dallas.
Winn, Watt W., Dallas.
Witt, Guy F., Dallas.
Wolfe, Joseph (Mil.), Dallas.
Wolff, Paul M., Dallas.
Woodard, Gay T., Dallas.
Woodard, Thad L., Dallas.
Woods, Ozro T., Dallas.
Woolf, Jack I. (In.), Chicago.
Worley, John R., Dallas.
Wright, Carleton C. (Mil.), Dallas.
Wylie, John T., Dallas.
Wyvell, Dorothy B., Dallas.
Yancey, R. S., Dallas.
Yarborough, Doyce C., Jr., Dallas.
Young, John G., Dallas.
Zier, Jas. Robt., Brownwood.
Zuelzer, Wilhelm (Mil.), Dallas.

DELTA COUNTY MEDICAL SOCIETY

Blair, Samuel F., Cooper.
Janes, Olen G., Cooper.
Janes, Olen Y., Cooper.
Janes, Osler Y., Cooper.
Lowry, David O. (Pres.), Cooper.
Westerman, Daniel B. (Sec'y), Cooper.
Wheat, E. Baxter, Daingerfield.

DENTON COUNTY MEDICAL SOCIETY

Allen, Jos. H., Justin.
Davis, Bert E. (Mil.), Denton.
Fiegel, Walter L. (Mil.), Lewisville.
Hayes, Lindley O. (Mil.), Denton.
Hinkle, Geo. W. (Sec'y), Denton.
Holland, Martin L., Denton.
Hutcheson, Melvin L. (Pres.), Denton.
Jones, Corinne Monk, Denton.
Kimbrough, Wallace C., Denton.
Lipscomb, Priestly, Denton.
Magness, Wm. M. (Mil.), Denton.
Pierce, Willa Louise, Aubrey.
Sullivan, John M., Sanger.
Woodward, Jack, Denton.
Wyss, Albert E., Denton.

ELLIS COUNTY MEDICAL SOCIETY

Baker, Edmund F. (Mil.), Ennis.
Carlisle, F. H., Italy.
Chapman, John M., Ennis.
Clark, Jos. L., Ennis.
Curby, John H., Maypearl.
Donnell, Herbert, Waxahachie.
Dykes, A. O., Italy.
Estes, Ted G. (Sec'y), Waxahachie.
Gough, E. F., Waxahachie.
Hastings, Miles E., Waxahachie.
Jackson, Walter B., Waxahachie.
Jenkins, J. B., Waxahachie.
Jeter, James R. (Mil.), Ennis.
Jones, Jos. E., Waxahachie.
Killian, J. E. (Pres.), Milford.
Ledbetter, W. C., Ennis.
Tenery, W. C., Waxahachie.
Thomas, A. L., Ennis.
Walker, Allan E. (Mil.), Ferris.
Watson, S. H., Waxahachie.

FANNIN COUNTY MEDICAL SOCIETY

Biggers, Lawton C., Bonham.
Cappleman, James J., Honey Grove.
Donaghey, Chas. J. (Mil.), Trenton.
Donaldson, James M. (Sec'y), Bonham.
Fry, Samuel D., Ladonia.
Kennedy, Alvis B. (Pres.), Bonham.
Lanius, John A., Bonham.
Leeman, Henry H., Windom.
Morgan, Lewie E. (Mil.), Bonham.
Saunders, David J., Bonham.
Savage, Harry B., Denison.
Scates, Henry R., Bonham.
Sellers, Sidney P., Honey Grove.
Smith, Edgar E., Leonard.
Stevens, Joe L. (Mil.), Leonard.
Ward, William Y., Ivanhoe.
Williams, Ethelbert (Mil.), Bonham.

GRAYSON COUNTY MEDICAL SOCIETY

Bates, I. C., Sherman.
Blassingame, W. Doak, Denison.
Brown, H. L., Sherman.
Carraway, J. H., Sherman.
Carter, Chas. S., Bells.
Carter, Wilbur, Sherman.
Collins, J. A., Gordonville.
Enloe, David C., Sherman.
Etter, Edward F. (Mil.), Sherman.
Fowler, F. F., Denison.
Freeman, Don W., Denison.
Freeman, William, Denison.
Gleckler, Arthur, Sherman.
Gleckler, John D., Denison.
Greer, Guy W., Whitesboro.
Hailey, E. L., Denison.
Henschen, G. E. (Hon.), Sherman.
Jamison, David K., Denison.
Johnson, Clyde P., Whitewright.
Klapproth, Herman, Sherman.
Lee, W. A., Denison.
Levin, Samuel O. (Pres.), Denison.
May, Ross R., Whitewright.
McElhannon, A. M., Sherman.
Meek, Grover C., Whitesboro.
Norman, Lois L. (Sec'y), Sherman.
Pierce, Paul L., Denison.
Ridings, A. L., Sherman.
Russell, Buford A., Sherman.
Shelley, Jos. L., Howe.
Southerland, W. I. (Mil.), Sherman.
Sneed, Archie G., Denison.
Sporer, Frank M., Van Alstyne.
Stephens, Geo. K. (Mil.), Whitewright.
Stout, Henry I., Sherman.
Strother, C. D., Sherman.
Tuck, Vernon L. (Mil.), Sherman.
Woodward, Max R., Sherman.

HOPKINS-FRANKLIN COUNTIES MEDICAL SOCIETY

Chandler, Henry E., Mt. Vernon.
Fleming, Jas. M., Mt. Vernon.
Fuquay, Zack C., Mt. Vernon.
Hanna, Wm. Ray (Sec'y), Sulphur Springs.
Harrington, C. E., Dallas.
Long, W. Frank, Sulphur Springs.
Longino, S. Byrd, Sulphur Springs.
McConnell, T. H., Sulphur Springs.
Saunders, W. B., Sulphur Springs.
Stirling, Earl (Pres.), Sulphur Springs.
Taylor, Fred O., Winfield.
Worsham, Archer B., Sulphur Springs.

HUNT-ROCKWALL-RAINS COUNTIES MEDICAL SOCIETY

Allen, Clarence G., Commerce.
Becton, Edwin P., Greenville.
Becton, Joe (Pres.), Greenville.
Bradford, Harry M., Greenville.
Cheatham, J. C., Wolfe City.
Cooper, J. S., Greenville.
Crim, E. T. (Mil.), Greenville.
Dickens, W. Mason (Mil.), Greenville.
Fain, G. Burton, Austin.
Goode, Emmette P., Greenville.
Handley, James J. (Mil.), Greenville.

Hayes, Elmer R. (Mil.), Greenville.
Jackson, C. M., Rockwall.
Jenks, Ralph W., Greenville.
Kennedy, Chas. T., Greenville.
King, H. E., Greenville.
King, Newell T., Commerce.
Leberman, Lowell H. (Mil.), Commerce.
Maier, Henry W., Greenville.
Morrow, Wiley C., Greenville.
Pearson, Preston S., Celeste.
Phillips, Wm. P., Greenville.
Reeves, W. B., Greenville.
Rogers, Harriet N. (Sec'y), Commerce.
Seyler, Louis W. (Mil.), Commerce.
Smith, J. R. (Mil.), Wolfe City.
Strickland, Thos. C., Greenville.
Swindell, John W. (Dead), Greenville.
Trentham, J. C., Jr., Greenville.
Trimble, Orman H. (Mil.), Greenville.
Waller, L. T., Commerce.
Ward, James W., Greenville.
Whitten, Samuel D., Greenville.

KAUFMAN COUNTY MEDICAL SOCIETY

Alexander, Gough H., Terrell.
Alexander, William F., Terrell.
Creel, Jane Nash, Dallas.
Friddell, Delmar T., Terrell.
Hall, Edward I., Kaufman.
Holton, Robert W., Terrell.
Hudgins, Dave H., Forney.
Jennings, Adolphus Y., Mabank.
Johnston, Lawrence W. (Sec'y), Terrell.
Lane, Early D. (Pres.), Terrell.
Livingston, E. N. (Mil.), Terrell.
Lyon, Floy E., Terrell.
Pollard, Wm. J. (Hon.), Wichita Falls.
Poplin, Richard W., Terrell.
Powell, Geo. F., Terrell.
Scarborough, James W., Terrell.
Scarborough, Lee F. (Mil.), Terrell.
Shands. Percy C., Mesquite.
Sloan, Roy C., Terrell.
Taylor, Harvey S., Kaufman.
Taylor, Homer A., Kemp.
Thomas, William M., Terrell.
Cockrell, Christopher C., Terrell.

LAMAR COUNTY MEDICAL SOCIETY

Armstrong, James E., Pairs.
Armstrong, John T. (Mil.), Paris.
Barker, Carl D., Paris.
Buford, Talma W., Pattonville, Rt. 1.
Creed, James R., Roxton.
Fitzpatrick, Wm. W., Paris.
Gilmore, Clarence E., Paris.
Goolsby, Elbert (Pres.), Paris.
Grant, Stephens H., Deport.
Hammond, David S., Paris.
Hunt, Thomas E., Paris.
Hunt, Thos. E., Jr. (In.), New Orleans.
Jennings, James L., Roxton.
Johnson, Malcolm L. (Mil.), Paris.
Kerbow, Dock F. (Mil.), Paris.
Lewis, Robert L. (Sec'y), Paris.
Lewis, Robt. L., Jr. (Mil.), Paris.
McCuistian, Lorenzo P., Paris.
McCuistian, Wm. W., Paris.
McDougal, Luther L. (Mil.), Paris.
O'Neill, Owen R., Paris.
Robinson, Oscar W., Paris.
Stark, Ernest H., Paris.
Stephens, John A. (Mil.), Paris.
Stephens, Luke B., Paris.
Townsend, Courtney M. (Mil.), Paris.
Walker, Marcellus A., Jr. (Mil.), Paris.
White, Hal. H., Paris.

VAN ZANDT COUNTY MEDICAL SOCIETY

Baker, Horace A., Wills Point.
Brandon, Ben B. (Sec'y), Edgewood.
Cozby, Raymond W. (Pres.), Grand Saline.
Cozby, V. B., Grand Saline.
Fry, Harry T., Wills Point.
Garland, W. L., Grand Saline.
Sanders, D. Leon, Wills Point.

WOOD COUNTY MEDICAL SOCIETY

Black, Wm. T., Quitman.
Buchanan, A. P., Mineola.
Burrus, R. E., Winnsboro.
Coleman, Robt. H. (Mil.), Mineola.
Farrington, R. A., Alba.
Mathis, James R. (Mil.), Mineola.
McDaniel, A. A. (Pres.), Mineola.
Peterson, Thos. H., Mineola.
Reed, Thos. B., Mineola.
Robbins, Virgil E. (Sec'y), Quitman.
Wheeler, Frank B. (Mil.), Winnsboro.

FIFTEENTH OR NORTHEASTERN DISTRICT

Dr. C. A. Smith, Texarkana, Councilor.

BOWIE COUNTY MEDICAL SOCIETY

Baskett, Roy F., Texarkana.
Beck, Edwin L., Texarkana.
Collom, S. Allen, Jr. (Mil.), Texarkana.
Frank, Chas. H. (Pres.), Texarkana.
Fuller, Theron E., Texarkana.
Good, Louis P., Texarkana.
Hibbitts, William, Texarkana.
Hunt, Preston, Texarkana.
Imes, Edwin D. (Mil.), Texarkana.
Jones, John W. (Mil.), Texarkana.
Kitchens, Chester E., Texarkana.
McGee, Ellis B., New Boston.
McGee, J. R., New Boston.
McKay, Edward D. (Mil.), Texarkana.
Parson, Geo. W., Texarkana.
Pickett, Reavis W., Texarkana.
Rives, John H., Texarkana.
Roberts, Anon W., Texarkana.
Robison, James T., Texarkana.
Smith, Chas. Adna, Texarkana.
Spinka, Frances P. (Sec'y), Texarkana.
Stuart, Charles C., Texarkana.
Tyson, Joe E., Texarkana.
White, Jasper N., Texarkana.
Withrow, Elizabeth R., Texarkana.

CAMP COUNTY MEDICAL SOCIETY

Bates, J. K. (Sec'y), Pittsburg.
Johnson, R. L., Pittsburg.
Lacy, Robt. Y. (Pres.), Pittsburg.
Mitchell, J. H., Pittsburgh.
Reitz, P. A. (Mil.), Pittsburg.

CASS-MARION COUNTIES MEDICAL SOCIETY

Allen, James I., Bloomburg.
Brooks, Jesse M. (Mil.), Atlanta.
Brooks, Marshall J., Jr., Atlanta.
Davis, Chas. E., Linden.
Grumbles, Earnest W., Atlanta.
Hartzo, James D., McLeod.
Jenkins, Homer L. D., Hughes Springs.
Jenkins, M. T. (Mil.), Hughes Springs.
Nichols, Joe D., Atlanta.
Roach, Felton R., Queen City.
Starnes, Adolphus E., Hughes Springs.
Taylor, Orval R., Linden.
Terry, Wm. S. (Pres.), Jefferson.
Wilson, Stephen W. (Mil.), Linden.
Woods, Andrew J. (Sec'y.), Jefferson.

GREGG COUNTY MEDICAL SOCIETY

Adams, Chas. C., Longview.
Adams, Joe E., Kilgore.
Allums, Loraine L., Kilgore.
Andres, Ben, Longview.
Awalt, Elmer W. (Sec'y.), Longview.
Cook, Hardy, Longview.
Hancock, A. R., Gladewater.
Hardwick, Robt. S., Longview.
Hunter, Buel R., Kilgore.
Hurst, V. R. (Pres.), Longview.
Jones, E. L., Longview.
Leake, Bain, Gladewater.
Marchman, O. M., Jr. (Mil.), Longview.
Markham, Louis N., Longview.
McKean, J. C., Gladewater.
McKellar, G. G., Longview.
McRee, J. T., Longview.
Niehuss, Henry H., Greggton.
Ross, H. A., Longview.
Rhodes, Geo. V., Longview.
Roberts, J. D., Jr. (Mil.), Longview.
Rushing, Garland S., Longview.
Stratton, F. L., Kilgore.
Swinney B. A., Longview.
Van Sickle, R. J., Longview.
Vines, C. L., Kilgore.

HARRISON COUNTY MEDICAL SOCIETY

Baldwin, John B., Marshall.
Bennett, Wm. H., Marshall.
Carter, Ray H. (Mil.), Marshall.
Cocke, Rogers C., Marshall.
Daniel, DuBose B. (Mil.), Waskom.
Davis, Carroll C., Marshall.
Granbery, R. G. (Mil.), Marshall.
Harris, James H. (Pres.), Marshall.
Heidleberg, Chas. H. (Mil.), Marshall.
Hill, John E., Marshall.
Holcomb, N. F., Marshall.
Littlejohn, Frank S., Marshall.
Marsh, John G., Karnack.
McCurdy, Carl, Marshall.
Mondrick, Frank V. (Mil.), Marshall.
Phillips, Arch J., Marshall.
Redding, L. M. (Sec'y), Marshall.
Tenney, Samuel W. (Mil.), Marshall.
Vaughan, Herbert H., Waskom.
Wyatt, Chas. A., Marshall.

MORRIS COUNTY MEDICAL SOCIETY

Anthony, Edward Y. (Sec'y), Omaha.
Baber, Dunbar R., Daingerfield.
Jenkins, Don Juan (Pres.), Daingerfield.
Moore, Rufus D., Jr. (Mil.), Omaha.
Smith, William, Naples.
Truitt, Crawford S., Daingerfield.

RED RIVER COUNTY MEDICAL SOCIETY

Butts, Thomas R. (Pres.), Annona.
Marx, Melvin, Jr. (Mil.), Clarksville.
Payne, Ross W., Clarksville.
Reed, Chas. B. (Sec'y), Clarksville.
Watson, Nowlin, Clarksville.
Wright, James L. (Mil.), Clarksville.

TITUS COUNTY MEDICAL SOCIETY

Bassett, T. R., Mt. Pleasant.
Caldwell, Pearson C. (Mil.), Mt. Pleasant.
Ellis, John M., Mt. Pleasant.
Ellis, John M., Jr. (Mil.), Mt. Pleasant.
Grissom, Thos. S. (Pres.), Mt. Pleasant.
Holland, John III (Mil.), Mt. Pleasant.
Smith, A. A., Talco.
Taylor, Willis A. (Sec'y), Mt. Pleasant.
Taylor, Wm. A. (Mil.), Mt. Pleasant.

UPSHUR COUNTY MEDICAL SOCIETY

Childress, Harmon J., Gilmer.
Fenlaw, Jos. L. (Mil.), Gilmer.
Marshall, Thos. E. (Sec'y), Gilmer.
Ragland, Hugh M. (Pres.), Gilmer.
Ragland, Madison S., Gilmer.

Texas State Journal of Medicine

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

Determined Opposition to the Wagner-Murray-Dingell Bills, introduced in Congress May 24, will be required to insure their defeat. The medical profession of the United States is again challenged by the forces which would regiment medical care in this country, including those who render and those who receive such care. Again there is the misguiding appeal that security is the goal sought, and too many people have been led to believe that the system offered will provide *free* medical and hospital care.

Attention is called here to an address delivered by Dr. James V. Sparks, a dentist and physician of Austin, before Bexar County Medical Society, appearing in this number of the JOURNAL, on his experiences in France when medicine became socialized in that country. He points out that the French medical profession, through a well directed campaign, defeated the first effort to socialize medicine in France, and then while resting on their laurels, the second effort proved successful. That same thing can happen here, and may do so unless there is a united, militant front in the face of the second threat in our own Congress.

We do not believe that we will be giving away any secrets or be charged with precipitate announcement, when we say that our Public Relations Committee, carrying out the purpose for which it was created, has planned a vigorous campaign against the present Wagner-Murray-Dingell bills, in which campaign, it is hoped, the full resources of the Association, its 126 component county medical societies, and the affiliated units of the Woman's Auxiliary will be utilized. The campaign will consist of a series of carefully prepared news releases to Texas newspapers, on which we depend to a great extent to carry to the public authentic information regarding what real effect such legislation will have on the public health and the medical care of the American people. These releases will be issued to newspapers directly, and through county medical societies. Full use will be made of the radio, combining the great educational value of these two important mediums—press and radio.

The Speakers' Bureau, formed and so effectively employed in the last campaign, will be again utilized to reach all classes and groups of our people, men and women, with the true facts regarding socialized medicine, and its devastating influence on medical care.

Contacts will be made with other organizations that will unite in the effort to again defeat the socialistic, bureaucratic scheme of medical and hospital care envisioned by the Wagner-Murray-Dingell bill. It is readily recognized that medicine must look to the public for active support if this legislation is to be defeated.

Short but informative pamphlets calling attention to the dangers inherent in Federal bureaucratic medicine will be made available to physicians for distribution to their patients.

The program is planned on a state-wide basis, but its success depends not only on proper direction and coördinated action by

county medical societies, but to a large extent upon the support and active participation of each member of the Association and the Woman's Auxiliary.

The Public Relations Committee can do no more than plan and execute major features of the program. The success or failure of the effort rests with the individual members of the Association, and we have full confidence in their response to the call that will be made on them for action.

Each member has been asked to secure a copy of S. 1050 from his Senator or H. R. 3293 from his Representative, in Congress, and to acquaint himself fully with the provisions of these measures, which are identical and commonly called, for the sake of convenience, the Wagner-Murray-Dingell bill. That is the first individual action called for on the part of members of the Association. Let us respond promptly to that first call for action in this highly important matter.

The Legislature Has Adjourned.—There are those who are glad, and others who are sad about the whole thing. Perhaps the prevailing state of mind among those interested in legislative matters is quite mixed. Among the problems of the medical profession a few were solved satisfactorily, but most of them failed of solution for one reason or another. While nobody expects everybody to agree on every measure, even in general terms, introduced in the Legislature, it is strange that such general and violent opposition is met when the friends of the public health undertake either to bring about the defeat of potentially or actually harmful legislation, or bring about the enactment of legislation necessary to the betterment of the health and welfare of the people. It is still more strange that the friends of such legislation will differ among themselves as to details and policy. Such disagreements really don't mean a great deal so far as advocates of such legislation are concerned, but they give splendid opportunity to the opposition to sabotage the program. The fact that legislative and political strategy and policy can no more be publicized than can military strategy and policy during war times, is not generally understood or appreciated. It is not always true that leadership is negligent because it is not publicly vocal. The successful poker player takes care not to disclose his hand, even in the draw. So, perhaps, considering these factors, our most recent legislative battles have not turned out so badly. Results could have been better, and they could have been worse.

It is not our purpose to present here a discussion of the several measures of a public health and medical nature, good, bad and indifferent, which were introduced in the Legislature, and consequently dealt with by our Legislative Committee. That will all come later in what promises to be a rather full and complete report from our Legislative Committee. We will discuss some of these problems here in a rather restricted and restrained manner.

It will be remembered that the House of Delegates last year directed the Executive Council, which includes in its membership the Committee on Legislation, to continue to support our Committee on Medical Licensure in its plan for medical legislation, with the understanding that no controversial legislation be undertaken this time, except and unless there is an emergency requiring something of the sort, some situation which will jeopardize the interests of the public health. It will be remembered, also, that the Executive Council was directed to continue to coöperate with the State Board of Health, particularly in the effort to secure the enactment of a modern, up-to-date sanitary code. Under these mandates it was up to our committee to refrain from carrying out the program of the Committee on Medical Licensure, no matter how desirable it might be, because it would have provoked controversy. It is also evident that the intention of our House of Delegates was that all efforts to lower the standards of the practice of medicine be resisted. Therefore, and under the circumstances, no effort was made to procure the enactment of the Basic Science Law, the revision of our Medical Practice Act, and the enactment of legislation providing for practice acts for the cults. Likewise under these instructions, every effort was made to prevent the enactment of chiropractic and naturopathic legislation, and legislation which would have forced tax-exempt hospitals to admit to membership on their respective staffs practitioners of sectarian medicine.

Suffice it to say at this time, and it is probably now not news, the several bills recognizing chiropractic and naturopathy were defeated by a narrow but definite margin, and the bill which would have forced tax-exempt hospitals to accept practitioners of sectarian medicine, also failed. There were many complications and much travail in the several legislative battles involved, more so than would have been had everybody understood what had been planned by our Legislative Committee with regard to the engagement as a whole. It was quite apparent that the advocates of chiropractic legislation were certain that no such legislation would be held as Constitutional but that did not seem to be a very strong deterrent force. The big idea seemed to be to get some sort of recognition, some

way. The same thing for naturopathy, only more so. The friends of chiropractic even caused the introduction of a Joint Resolution seeking to amend the State Constitution so that there could be different standards for different cults in the practice of medicine. It is worthy of comment that the cults should now want to eliminate from our State Constitution a provision which was placed there originally for their protection, and that the regular medical profession which has all along bitterly resented this attempt to protect the cults, should now desire its retention in the State Constitution.

Our efforts for the past several years to procure the enactment of an up-to-date sanitary code were finally rewarded in the session of the Legislature just concluded. The Legislative Committee is deserving of commendation for this accomplishment, particularly its chairman, who made this particular piece of legislation his special objective.

The efforts of the State Board of Health, the State Medical Association and several interested groups, to enact into law measures providing for effective physical and serological examinations of both parties to marriage, and of mothers prior to the birth of their children, failed because of the intervention of representatives of organizations which felt they were in a better position to advise about such matters than was the State Board of Health, or the State Medical Association. Had there been time enough, however, both of these measures with modification from the originals would have become laws.

One of the measures included in our legislative program, at the instance of the State Board of Health, to set up a standard health unit bill, would have proven a great help to the State Health Department. It was killed by meddling.

A determined effort was made to enact legislation covering postmortem examinations in appropriate cases. While it is true that County Commissioners Courts are authorized now to procure such examinations, there is much to be desired in the matter of directives. In other words, while the effort is to determine the cause of death, and other important evidence in case of sudden death, there is no requirement that trained personnel make such examinations. While many practicing physicians are fully competent to make any such examinations, perhaps most of them know little about the technicalities involved and care less. They don't want that kind of work. While the measure in question could not compel County Commissioners Courts to pay for such examinations, it could and did provide for proper procedures in the instance commissioners courts would do so. In other words, it was the nearest approach to attainment of the objective of the legislation which could be made. The measure had to be rewritten because of certain legal technicalities, and it got back into channels too late for enactment.

An effort was also made to throw some restrictions around the sale of the barbiturates. It will be recalled that the State Pharmaceutical Association and the State Medical Association, some years ago coöperated in procuring the enactment of such a law. Apparently the restrictions thrown around the sale of the drug were so burdensome that many druggists objected, and eventually the law was rescinded. An effort was made to this time provide a bill which could be enforced reasonably well without too much red tape. The bill would have passed except for the fact that other important public health legislation got in the way. It will be ready for the next session of the Legislature.

An unexpected and startling bit of legislation, whether or not desirable and beneficial, occurred when the Crippled Children's Bureau was transferred from the State Department of Education to the State Department of Health. The idea of the health officer entering the practice of curative medicine has never been overly popular with the medical profession, but it begins to appear that in some particulars, that under discussion, for instance, it is better so than available alternatives. The health officer is as much a physician as anybody, and preventive practice is not his exclusive specialty. The public health must depend to a large extent upon curative medicine as a preventive measure. The development of the specialties in medicine is so extensive and so rapid, that it is hard to keep them all balanced, including preventive medicine. The same problem was presented in the consideration of the tuberculosis control program recently given so much thought by tuberculosis societies, health agencies and the Legislature, under which the State Health Department would take over the large task of finding cases and seeing that they are treated. While the program did not succeed, the effort definitely blazed the way for success in the near future. Of course, under neither of these programs is it necessary that the health officer practice curative medicine, but it will be necessary that the health officer see to it that somebody does.

A bill was enacted into law authorizing cooperative societies or associations of farmers to provide both hospital and medical service for their members. Neither procedure nor program was set up in the law. It will be just as good and just as bad in its application as the medical profession locally will permit

or require it to be. It can be the first step in the matter of socialized medicine, or an effective resistance or preventive of socialized medicine.

Prairie View Normal, the one negro college in the State presuming to extend higher learning to our negro citizens, was by law given the status of a university. Under the terms of the law, schools of medicine, engineering, pharmacy and the like, may be set up by this school, if and when the necessary appropriations are available. An effort was made several years ago to provide for at least a two-year course of medicine at Prairie View Normal, with clinical teaching at nearby Houston, but the negro educators of the State felt that unless the entire program of education in medicine could be carried through, reliance on the present arrangements had better be continued. At the present time, those negro students who qualify can be given scholarships in recognized medical colleges by the State.

Again we would say that our Legislative Committee will report in detail on the more than fifty measures introduced in the recent Legislature, in which the medical profession of the State might properly take an interest. Such a detailed discussion would be out of place here.

We are advised by our Legislative Committee that it has the legislative record of each member of the recently adjourned Legislature, and these data will be made available to county medical societies. Those who have been particularly active in behalf of our program will be commended to their respective medical societies. Our Committee thinks this is both fair and just, and that our people are entitled to know who of our representatives in the Legislature are wont to go off after false gods in matters of public health and welfare legislation, and who think straight in such matters and act accordingly.

No Annual Session in Immediate Prospect.—As heretofore and variously announced, the War Committee on Conventions of the Office of Defense Transportation, has refused to permit conventions of any sort requiring an attendance of fifty or more out-of-town members. The travel and hotel conditions, already crowded to the limit because of the usual war activities, were at the time of the refusal in immediate prospect of being seriously aggravated and extended by the redeployment of troops following V-E Day. Those in authority in the State Medical Association of Texas fell immediately into full coöperation with the Office of Defense Transportation, and abandoned all idea of holding the regular annual session, but did ask permission to assemble our House of Delegates. It seemed necessary to do something in order to perpetuate the Association and enable it to function in accordance with its Constitution and By-Laws, and the terms of its incorporation by the State. This permission being refused, the decision was very promptly made, following what was considered good and sufficient legal advice, to continue the administration then in office until a new administration could be inaugurated by the House of Delegates.

It has all along been anticipated that the peak in troop movement across the country would be reached early in the Summer, and that perhaps small meetings, such as would be that of our House of Delegates, might be held in at least certain areas of the country. It now begins to appear that it will be considerably later than that before traffic and hotel conditions will be unloaded to the extent that such meetings as ours may safely be held. The same thing has happened to all other state medical associations, and even to the American Medical Association. Organizations which may be controlled and directed by small groups have not been bothered greatly. The Woman's Auxiliary to the State Medical Association of Texas, for instance, has been able to determine matters of policy and procedure by a meeting held within the attendance limit of the Office of Defense Transportation.

Library Receives War Bond Endowment.—Dr. D. H. Hudgins of Forney, a perennial member of the House of Delegates from Kaufman County Medical Society, widely and favorably known throughout the State as one of the dependable wheelhorses of the Association, is the latest donor to the Library. Under date of June 4, 1945, Dr. Hudgins addressed the following letter to the Executive Secretary of the Association:

"Because of my interest in the Library of the State Medical Association and what it means to our members I have decided to make a small contribution in the form of a one thousand dollar ($1,000.00) war bond.

"By doing it this way, I am serving two much deserving purposes which are close to my heart. I am doing this in honor of my daughter, Inez Anthony Hudgins of Ridgewood, N. J.

"If you will tell me just how to have the bond made out I'll send it along as soon as I get it. I am wondering if this method would appeal to others who would like to help the Library."

Dr. Hudgins was promptly advised to have the bond made out in the name of the Texas Memorial Medical Library Association, which he did.

The fund, named in accordance with the donor's wishes, in honor of his daughter, will be known as the "Inez Anthony Hudgins En-

dowment Fund." When the bond matures, it will be reinvested by the Board of Trustees, thus perpetuating the fund, so that only the interest will be expended in the development of the Library.

Dr. Hudgins has confirmed his faith in Texas medicine by contributing generously of his means in the interest of its scientific advancement. In doing so, he has likewise made a significant contribution to the betterment of medical care in Texas, to say nothing of the value of the loan to the Nation in a time when it is vitally needed. Men of the stuff of which Dr. Hudgins is made are what have made the American Nation what it is today. May we express the hope that his example may be emulated by many other members of the Association.

Penicillin Research Center.—Attention of the JOURNAL has recently been called to a new type of medical institution in Dallas, unique in Texas, and probably also in the United States, devoted to research in the penicillin treatment of syphilis.

The institution is housed in a 10-apartment building, located one block from the Southwestern Medical College and Parkland Hospital. It is an integral part of the Dallas Syphilis and Venereal Disease Clinic—the teaching clinic for the medical college. It provides twenty beds for patients requiring penicillin treatment, thus enlarging the bed capacity of the teaching department from twenty beds in a charity hospital by an additional twenty beds in a separate, completely remodeled building for private and charity patients.

The most unusual feature of the Penicillin Research Center is that it is a non-profit institution operated by local philanthropy, requiring no financial support from the Medical College, the Public Health Service or the City or County of Dallas. Private patients are not charged for hospitalization, but do pay for professional services and penicillin. Charity patients receive both hospitalization and professional services free.

The Center became a necessity according to Dr. Arthur G. Schoch, Director of the Dallas Syphilis and Venereal Disease Clinic, with the advent of penicillin in the treatment of syphilis, as nearly all hospitals are now overcrowded. Since this type of patient is usually ambulatory, and does not require bedside nursing care, a separate building was considered desirable to prevent tying up of general hospital beds. The majority of patients treated with penicillin are a part of the National Research Council study, and the staff of the institution and its operation, are under the direction of Dr. Schoch, a responsible investigator for that council.

It was thought that the medical profession of the State would be interested to know of the existence of such an institution.

CURRENT EDITORIAL COMMENT*

Physical Medicine Looks Ahead.—Physical medicine, frequently called the infant of medicine, is actually old from the standpoint of its therapeutic effects. It is new because only recently has its value been widely recognized; only recently have certain electrical and mechanical modalities provided a safer, saner and more rational form of treatment for human ills; only recently has this infant grown to such proportions as to qualify it as a highly specialized field.

Among some of the newer forms of physical treatment employed today are: hypothermia and hyperthermia, ultraviolet irradiation for air sterilization, electric stimulation of muscle in peripheral paralysis, electric shock treatment in depressive mental conditions, iontophoresis for stimulation of capillary circulation, more modern methods of exercise and reconditioning and the correlation of occupational therapy with physical therapy.

The value of these techniques for the early treatment of war disabilities has been reaffirmed by the military services. Physical therapy equipment has been moved from base and general hospitals to station and field hospitals, and even far into the jungles. The problems of wartime rehabilitation have increased the need for further knowledge of physical medicine on the part of all persons who treat the sick and the disabled. Intensive training programs have been launched to provide adequate staffs for physical medicine for both our civilian and armed services; but the demand for trained physicians and technicians has greatly exceeded the supply.

It would be a serious error to imply that the remarkable development of physical medicine within the past few years is entirely due to war. Its growth has been accelerated also by the simultaneous development of various organized groups of medicine. Among

*This department of the JOURNAL presents editorial comments on current items pertaining to the science, art and practice of medicine, contributed by members of the State Medical Association and scientists closely associated with the medical profession of Texas. Invitation is hereby extended to any member of the State Medical Association of Texas to submit such discussions for this department. The discussions should not be more than 500 words in length.

these are: the Council on Physical Medicine of the American Medical Association, the Committee on American Health Resorts, the National Foundation for Infantile Paralysis, the National Research Council and the Baruch Committee on Physical Medicine. All of these have recognized the need for further study of physical agents and techniques in medicine and have fostered and encouraged basic and clinical research in this field. By stimulating scientific investigation and correlating knowledge on this subject, these agencies are firmly establishing physical medicine as a fundamental tool to medical therapy.

Despite the fact that continued research in physical medicine is proving its merit, the general medical profession seems to be somewhat reluctant to recognize the importance of this field. This is due to lack of educational facilities and of trained personnel, both medical and technical. Because of this, together with increased responsibilities of wartime and lack of physical equipment, few definite plans apparently have been made or are being made by many smaller hospitals and clinics for increased use of physical procedures. Partly through necessity, the infant of medicine in some sections of our country is being neglected. On the other hand, many excellent programs are being planned and executed by leading medical schools and by civilian and military hospitals.

Too often physical medicine has been looked upon as merely an orthopedic therapy and its value in other surgical, medical and mental conditions has been completely overlooked. This situation would be corrected by improved instruction in physical medicine in medical schools. Here is not the place to discuss in detail proposals which are being made by many progressive schools and hospitals to take full advantage of the possibilities of physical medicine. It suffices that physical agents and procedures represent a most important section of reconditioning and a large percentage of patients in a general hospital would benefit by intelligently prescribed massage and the use of ultra-violet rays, infrared rays, diathermy, whirlpool baths, faradic and galvanic stimulation, and other physical measures.

Enthusiasm for physical medicine will grow when the economic, social and medical advantages of such a program are presented and explained to the public and to the medical profession. A good start in this direction has been made in the dissemination of factual information by the Medical Department of the United States Army, the National Foundation for Infantile Paralysis and the Baruch Committee on Physical Medicine. It behooves all civilian physicians and hospital administrators to look to the future, to make plans to keep pace with rapid developments in reconditioning and rehabilitation in which physical medicine plays such an important role.

REFERENCES

1. Coulter, J. S.: A Rehabilitation Center for the Injured Worker, Arch. Phys. Therapy 25:529 (Sept.) 1944.
2. Editorial: Council on Physical Therapy Becomes Council on Physical Medicine, J. A. M. A. 125:912 (July 29) 1944.
3. Grant, David: New Horizons in Physical Medicine, Arch. Phys. Therapy 25:525 (Sept.) 1944.
4. Krusen, F. H.: The Future of Physical Medicine, J. A. M. A. 125:1093 (Aug. 19) 1944.
5. Report Baruch Committee on Physical Medicine, New York, April, 1944.

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SURGEON GENERAL OUTLINES PERSONNEL RELEASE POLICY

Substantial releases of Army Medical Department personnel will not take place before the latter part of this year. Surgeon General Norman T. Kirk said in announcing a policy on discharges in conformity with War Department procedures. This is due to the fact that the peak of the Medical Department's activities will not be reached until fall.

In formulating the policy consideration was given to civilian needs for professional medical, dental and veterinary care without weakening military needs. Other factors considered were the length of time necessary for personnel to complete their work in the Mediterranean and European Theaters and return to the United States; replacement of Medical Department personnel in active theaters by those who have not had overseas duty; necessity for the maintenance of a high standard of medical care; the heavy load of patients in the United States; evacuation of the sick and wounded from Europe in the next ninety days and continuing medical service in the Pacific.

The policy applies with equal effect to Army Medical officers assigned to the Veteran's Administration and other agencies.

It reads:

Medical Corps

a. Officers whose services are essential to military necessity will not be separated from the service.

b. Officers above 50 years of age whose specialist qualifications are not needed within the Army will receive a high preferential priority for release from active duty.

c. Adjusted Service Rating will be utilized as a definite guide to determining those who are to be separated.—S. G. O. Notes, May 31, 1945.

POLICY ON ASSIGNMENT OF M. C. OFFICERS TO VETERANS ADMINISTRATION

Additional U. S. Army Medical Corps officers will not be assigned to duty with the Veterans Administration unless they had previously been serving on the staff of that organization, Major General George F. Lull, Deputy Surgeon General of the Army, announced.

In outlining this War Department policy General Lull stated that in the event officers specifically requested service with the Veterans Administration they would be eligible for such assignments.

SOCIALIZED MEDICINE IN FRANCE

By
JAMES V. SPARKS, M. D., D. D. S.
AUSTIN, TEXAS

During the twenty-five years that I practiced my profession in France, I had the enviable opportunity of having a ringside seat in the making of European history and the events that caused not only the fall of France, but the decline and decadence of other European countries, and events which led up to the present war in Europe. Now I am home again in America, and as I ponder over the past and watch what is going on here at the present, I sometimes wonder if I am not dreaming, for ever so often I seem to be living again through events that have already transpired. I have the impression that I am again watching something happen that has happened before. Quite often these episodes have anything but a happy ending. As I contemplate today the tragic state of France and the other countries of Europe, I wonder why we in America have made no effort to avoid making the same errors they unfortunately made. I wonder why we do not have sense enough to profit from their bitter experiences.

Tonight I am going to make a suggestion; a suggestion that in a way is revolutionary and a suggestion with which many of you may not agree, yet one that I trust for your sake you will listen to, study and adopt. Our professional societies are antiquated, and they need to be revamped. That they have served us faithfully in the past, no one will deny, but in their present form as they exist today, their usefulness is extremely limited. I am going to suggest that our societies must and should enter politics. Not partisan politics, mind you, but politics, and that we take a stand on those questions that affect us in our professional and home lives. I suggest that we should not only raise our voices, but we should go further and employ lobbyists and public relations counsels, and that instead of complacently sitting back and contenting ourselves with griping, we should take an active and righteous place in the forming of public policies. Certainly as a class we are more advanced intellectually and culturally than the majority of members of different labor unions, yet these people are represented before Congress and they are forming, by pressure, public policies. They are looking out for their own interests, and some of the plans that they are advocating, to which our congressmen are listening, are often exceedingly harmful to us, to put it most mildly.

Address delivered before the Bexar County Medical Society, San Antonio, Texas, January 11, 1945.

I remember so well, even though it was over ten years ago, the day that two doctors called on me in offices in Paris and informed me that I was down for a hundred-dollar contribution. I was quite astonished and inquired as to the reason for such a large donation. "It's to fight socialized medicine," said one. "We must do all in our power to prevent regimentation," added the other. That was the first time I had heard of socialized medicine, but from that day to this I have been exceedingly interested in it and its development. Now the bill that was at first proposed in France was a most vicious bill, but no more so than the Wagner-Murray-Dingell bill that is before our Congress now. The medical professions were up in arms and fought like they had never fought before. They finally succeeded in defeating the bill, but then instead of being ready to meet a situation that they could not dodge, they fell back after their first victory into a lethargic state; they sat back and rested, but as they were resting, a new bill was presented, a bill which with terrific labor union backing was passed in spite of every effort the medical professions could make to stop it, and France had socialized medicine. Now this law that was passed was certainly not perfect. Surely the doctors could have drafted a much fairer and better law, but their entire efforts had been spent on fighting what others had proposed. They themselves had offered nothing constructive. In spite of the fact, which I am sure will surprise many of you, that this law was drawn up by the laity, it was not a bad law as a whole, and if the medical professions were called upon to vote today on whether to keep their present law or to abolish socialized medicine, the vote would be predominantly in favor of its retention. Their law had many faults, it is true, the principal one being, and this fault exists in the Wagner bill also, that the money collected did not go into a separate fund and its use was not restricted to the purposes for which it had been collected. The money collected was put into the general fund, and when time came to start paying old age pensions and other provisions, there was no money available, but only a book credit, and it became necessary for their legislature to appropriate additional funds and to increase taxation to cover their appropriations.

There was in the French law a most important provision and that one is totally lacking in the Wagner bill. That was the care it assured the needy, the poor, and the indigent. Surely the one and only logical reason that can be advanced for socialized medicine is that by it, proper medical care is assured everyone regardless of his financial

situation. However, in the law now before Congress, there is no provision for the care of those who need it most, but there is a most discriminatory provision whereby all government employees are taxed only half of what other employees must pay. The total tax collected in France for Social Security was 5 per cent of salaries under $2,500, to be paid in equal parts, half by the employee and half by the employer. In spite of the fact that this rate is so much less than the rate proposed here, it was far more than was needed to cover all the costs of socialized medicine and to build up the planned reserve for old age pensions.

Withholding taxes in America are fairly new, but they have one very bad feature, for as time passes, the employer has to pay the entire tax. New employees when they are hired tell the employer that they want, so much for themselves or, in other words, they want a tax-free wage. In the long run, all withholding taxes become an additional burden to the employer and an augmentation of wages for the employed. In France a scale of fees was determined upon; fees that were about half of what was considered the average fee charged. This sum was paid to the doctor or dentist without quibbling, once the operation or treatment was completed. However, a doctor was not forced to treat a patient for this fee if he did not care to do so. He could refuse to treat any case or he could tell the patient that his fee was higher than that allowed by the State, and if the *malade* desired his services, he would have to pay out of his own pocket an additional sum. The doctors were always sure that the portion of a fee guaranteed by the State would be paid, which was certainly not the case of the part to be paid by the individual. Now in the case that a sick person could not find a doctor who would care for him for fees prescribed by the State and the patient either could not or did not wish to pay additional fees, there were the state hospitals to which he could go for treatment. Beautiful hospitals were erected and equipped all over France, and at first they enjoyed wonderful success. They were soon so full that it was impossible to find a room in one of them. This condition, however, did not last long, and soon these hospitals were in disrepute. Patients soon learned that once they were in one of these hospitals, their identity was lost, and they were simply a number. One doctor treated them one day and another the next. They missed the personal touch of their family doctor who was interested in them and their case; they missed his sympathy; and, in the end, only those unfortunate people who could not make other provisions entered these hospitals. We can sum up by saying that socialized medicine in France has done one good thing—it has provided medical care for the poor.

There is another matter which I think is of vital importance to all of us and one that will affect our future to a great extent and holds for you far greater dangers than socialized medicine. That danger is inflation. Those of you who have slaved and saved, those of you who have bought insurance which you think will care for your loved ones when you have passed away, those of you who have annuities, pensions, or savings upon which you plan to live in your old age, had better beware. What good would any of them be if we should have inflation? What good would an income of $100 a week be to your wife when you are no longer here, if with that $100 she cannot pay her rent? We have seen it happen in China, France, Italy, Poland, Spain, Greece, Germany, Belgium, and Rumania. We are headed straight down the road to it here in America. In the December 25 issue (1944) of Newsweek is a most interesting and instructive article entitled, "How the Money Rolls Out." It tells what is happening here in America, and it should be read by all. In the eight months ending December 13, 1944, the paper money in circulation increased four billion dollars or, in other words, over half a billion dollars a month, which means more than sixteen million dollars a day. Pay rolls are up two and one-half times over what they were in 1939. Prices have risen over 33 per cent, and this makes no allowances for subsidies paid or the lowering of the quality of many articles. How long do you think that this can continue? Should we not make some protest before it is too late? Should we not take some action before we, too, are doing as I saw them do in France, pay what to us would be two dollars for their morning newspaper?

Other important matters that should receive our attention and to which we should give considerable thought are the question of taxes and our growing national debt. Our debt is growing and growing; we borrow and borrow. Of course, many of you think it is because of the war. I am sure that there is not a person here tonight who objects to our war expenditures, for no matter what the war costs us, no matter what sacrifices the war entails, we must make them, for we must win the war or perish; but the money our government is throwing away on non-war spending can and should be curtailed immediately. France at one time was paying sixty cents out of every dollar she collected in taxes to pay the interest due on her debt. When we stop to think that it will take six billion dol-

lars a year to pay the interest rate on our national debt, if the interest rate can be kept around 2 per cent, which is doubtful, that pensions after the war will cost us at least four billion dollars a year more, and that the refund due on excess war profits tax will amount to another two billion dollars, that this makes a total, without any provision whatsoever for the current governmental expenses, of a sum approximately twice as large as our entire national budget of twelve years ago, it is time for us to give serious consideration as to what steps we should take. The working men through their unions, the garbage collectors, the street cleaners, the miners, the bus drivers, the janitors, the elevator operators, to mention only a few, are guiding our government through their unions in forming its policies and plans for the future. Do you not think that it is time that we, of the medical profession, raise our voices through our societies and that we help to make the plans and policies of our government, especially those which will have a distinct influence on our lives and future?

Capitol National Bank Building.

BATTLE INJURIES OF THE URETHRA WITH URINARY FISTULA

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During the present conflict, urethral wounds have been found to be quite uncommon in occurrence. However, such wounds will tend to become more frequent with the passage of time because the type of projectiles used, such as bombs and land mines, which tend to cause injury from below. Three factors which belie the serious nature of such wounds may be present. They are apt to be small in size, are prone to be overlooked if another larger injury is present and the wound of entrance may be located at some distance from the urethra. In civil life many deep wounds of the urethra are accompanied by some form of fracture to the pelvis. This likewise is true in war wounds.

Some orientation as to the site injured may be obtained if one recalls that missiles passing transversely at the level of the lower portion of the greater trochanter of the femur tend to implicate the prostatic urethra, while those at the level of the middle of the small trochanter involve the bulbous portion of the urethra. The rectum is frequently injured in anteroposterior wounds in the perineal area.

The complication most feared with wounds of the urethra is the infection which accompanies urinary extravasation. This is particularly true in small wounds where drainage of extravasated urine is less apt to occur than with large gaping injuries. The paths which extravasated urine follow have been well recognized with the determining factor as to spread, being whether the wound is anterior or posterior to the triangular ligament. It is important that emphasis be placed, not upon the extravasation of urine, which is also important, but rather upon the bacteria which are carried throughout the tissues. The degree of inflammation varies with the specific bacteria involved, the amount of lacerated tissue present, the local tissue resistance and the general condition of the patient.

Urinary extravasation anterior to the triangular ligament results in urine entering the superficial perineal space. It is confined superficially by Colles' fascia, and spread into the ischio-rectal fossa is prevented by the union of Colles' fascia and the inferior fascia of the urogenital diaphragm. A lateral spread is prevented by the attachment of the fascia to the ischio-pubic rami. Therefore, the urine tends to go forward, distend the scrotum and follow the spermatic cord. Infiltration may extend superficially over the penis and the anterior abdominal wall.

Injuries posterior to the triangular ligament result in a different type of spread. The ischio-rectal fossa may be involved or the urine may pass upward and backward between the prostate and the rectum. It may break through the deep layer of the triangular ligament and go upward and anteriorly behind the symphysis pubis into the prevesical space of Retzius. Further spread upward between the peritoneum and the transversalis fascia may occur.

The symptoms of traumatic rupture of the urethra are those concerned with bladder function. Retention of urine, hematuria, extravasation with infection and perineal, scrotal or suprapubic swelling may be found. Digital examination of the rectum where pelvic extravasation has occurred reveals a doughy feeling about the prostate. The escape of urine through the wound is, of course, diagnostic. Extravasation in conformance with fascial planes may be absent because of the disruption of those planes by the missile. It is important that injury to the urethra be proven absent when a patient with a wound of the perineal or hip area presents himself for treatment.

The treatment of such wounds may be properly divided into those considered as early and late. Where the wound has been recently incurred (and a time limit of six to twelve hours should be enforced when defining recent), a full excision of the damaged

area is indicated and all dead and dying tissue is removed. Free drainage is provided and the various devious pathways through which the urine has spread should be opened widely. If the opening is direct to the urethra, a sound may be used in it as a guide to dissection. Suprapubic drainage should be provided and an indwelling catheter can be used to advantage to drain the bladder and to serve as a splint for the ruptured urethra. It is the general feeling that repair of the urethra should be attempted in early cases.

The treatment of late cases provides a slightly different problem. Debridement with wide opening of the tissues, even to a more extensive degree, should be practiced. Urethral repair is not to be undertaken unless circumstances are particularly favorable. The measures instituted are primarily those of restricting the spread of infection and are lifesaving in nature.

The fluid balance of the individual must be carefully followed and enough fluid given that the urinary output be at least 1,200 cc. in twenty-four hours. This is particularly important if the sulfonamides are administered concurrently. The *p*H of the urine must be watched and if the urine becomes alkaline an acid salt such as ammonium chloride can be given to acidify the urine and prevent the formation of deposits in the urinary tract. The administration of whole blood and plasma are of great importance. Examination of the various blood constituents should be made frequently. Unless proper surgical treatment is initiated early, death or one of the several sequelae may occur.

These sequelae are several and have been classified by Bailey as:

1. Urethro-cutaneous and/or urethro-rectal fistula,
2. Strictures whose severity varies with their situation, the degree of trauma and amount of extravasation,
3. Persistent urinary sepsis,
4. Formation of calcareous deposits, and
5. Disturbances of sexual function.

We have had occasion to treat two individuals with such injuries. Both cases were submitted to our care well after the time of injury, so that we were concerned more with the treatment of the sequelae of such injuries, rather than with immediate surgery after injury.

CASE REPORTS

Case 1.—The first of these two individuals was a 24 year old white male who was struck by a piece of fragmentation bomb which entered the right scroto-inguinal area, tore away the right testicle and the spermatic cord, caused a laceration of the posterior urethra and entered the left wall of the anal canal. A bedridment of his wounds and a suprapubic cystostomy were done on the day of injury. Approximately fifteen days later the fragment of the bomb was removed from the left anal wall by a rectal approach and twenty-seven days after injury a catheter was inserted into the urethra. On admission here the suprapublic tube was still in place. The wound in the right scroto-inguinal region had not healed and a moderate amount of purulent discharge was draining from the area. A laceration of the left anal wall, just above the sphincter, could be felt upon digital examination. Control of defecation was lost. Flatus, fecal material and urine were passing through the scroto-inguinal wound and in addition urine was passed by rectum. The urine drained through the suprapubic tube was dirty, cloudy and filled with sediment. His general

Fig. 1. Photograph showing suprapubic tube and circle of catheters.

condition was extremely poor and he showed all the evidence of a debilitating illness. The catheter was removed from the urethra, after a sufficient period of time had elapsed, that healing might have occurred, and attempts were made to dilate the rather severe, posterior urethral stricture. Under caudal anesthesia, dilatation of the urethral stricture was done but efforts to re-establish a urethral channel at this time were unsuccessful.

Thus, we were faced with three problems. The cloaca which had been established at the time of injury, had to be abolished, the continuity of the urinary passages had to be restored and the stricture in the posterior urethra had to be dilated. It was logical that the fecal stream be diverted from the urinary passages first, and if successful, the second and third phases of surgical repair could be undertaken.

Operative approach for the abolition of the cloaca was made through the perineum by a transverse incision anterior to the rectum. The urethro-rectal fistula was isolated and divided, the mucosa of the rectum was trimmed away about the orifice of the fistula and the opening inverted into the bowel. The perineal wound was packed open loosely. Healing was slow but little fecal material was noted to pass through the operative wound in the succeeding period. This eventually stopped and the wound healed. Closure of the perineal wound was assisted materially by frequent hot Sitz baths.

During the period allowed for healing of the perineal wound the patient continued to have symptoms referable to his cystitis and occasional attacks of left renal colic. Although the greater portion of the urine was drained through the suprapubic tube, small amounts continued to pass through the scroto-inguinal wound. Improvement in general condition,

although slow, was progressive and the patient was finally considered ready to have urethral continuity reestablished. It was quite evident that instrumentation alone from below would be entirely inadequate in the creation of a new urethra. Consequently, under general anesthesia the suprapubic sinus was excised and the bladder opened. The patient was then placed in the lithotomy position and a sound passed through the urethra into the bladder, using the aperture in the scroto-inguinal wound as a guide for finger in directing the sound. A rubber urethral catheter was then attached to the sound and the catheter was withdrawn from the bladder through the external urethral orifice. A second catheter was then attached to the first and a circle of two catheters made. A suprapubic tube was introduced in the usual fashion and the wound was closed (Fig. 1). The granulation tissue in the right scroto-inguinal region was curetted gently. The immediate postoperative course was excellent but a few days after operation a moderate amount of hemorrhage from the suprapubic wound occurred. The wound was opened widely, thoroughly cleaned and packed, the bladder lavaged and transfusion administered. These measures served to control the bleeding. The wound in the suprapubic area gradually filled in with granulation tissue and eventually progressed to complete healing. Likewise the wound in the right scroto-inguinal region finally closed.

The last problem remaining was that of the urethral stricture. The urethral catheter was removed about three and one-half weeks postoperatively and it was found that a No. 18 French sound could be passed into the bladder. Dilatation was carried out slowly and gradually and progressed until a 24 French sound could be passed before he was transferred from our care. When he left he had gained weight, strength and felt quite well. The wounds in the perineal, right scroto-inguinal region and the suprapubic area were healed. Control of defecation was excellent and urination was free. A stricture moderately severe in nature was still present in the posterior urethra at the site of injury, but this too was responding to gradual dilatation.

CASE 2.—The second of these individuals was a white male, aged 23, whose injury was due to a gunshot wound of the left upper thigh when he was struck by a fragment of mortar shell. Debridment of the wound was effected and a cast placed on his left leg at a Field Hospital. Evacuation further to the rear was effected and he was found to have suffered comminuted fractures of both inferior rami of the pubic bones and to have urinary leakage from his wound. A suprapubic cystostomy was done on the day following injury and the patient was subsequently transferred to a General Hospital. Later a No. 20 French sound was passed through the urethra but it was not possible to insert a catheter.

Upon submission to our care a suprapubic fistula with a tube in place was found. The patient stated that he had not passed any urine through the urethra since the time of his injury. Physical examination was essentially normal except for the findings in the abdomen. The external genitalia were normal to inspection and palpation. Exploration of the urethra with a bougie revealed a stricture in the posterior portion. A scout film of the urinary tract revealed transverse fractures of the descending rami of both pubic bones with very slight separation present between the fragments. A metallic fragment measuring about 4 by 1 cm. was seen in the upper portion of the right thigh overlying the lesser trochanter. Calculi were not visualized any place in the urinary tract.

The patient was prepared for operation to reconstruct his urinary passages. An external urethrotomy was done, and an attempt made to pass a sound through the urethra from the external orifice. The stricture was palpable through the operative wound but efforts to pass a sound through the stricture were unavailing. Undue force was not used because of the fear of further rupture of the urethra so the wound was packed open and the operation concluded. Gradual healing in this area took place and at a later

FIG. 2. Photograph showing suprapubic tube and circle of catheters.

date a combined approach through the bladder and perineum was made. Under continuous spinal anesthesia a midline suprapubic incision was made, the fistula resected and the bladder wall freed from the recti muscles. The patient was then placed in the lithotomy position and a transverse incision was made in the perineum, exposing the urethra. The urethra was then incised, producing an external urethrotomy. A La Fort dilator was passed through the prostatic urethra from the bladder side and the threaded tip forced through the external urethrotomy opening. A silk suture was passed through the eye of a No. 18 French Robinson urethral catheter and then tied to the threaded tip of the dilator. The dilator was then pulled back through the prostatic urethra, bringing the urethral catheter into the bladder. A second Robinson urethral catheter was passed through the penile portion of the urethra and out the urethrotomy wound. The tip of this second catheter was then sutured to the distal end of the first catheter. This junction of the catheters was drawn out of the cystotomy wound and the two free ends of the rubber catheters were sutured together producing a complete ring of rubber catheter (Fig. 2). The cut surfaces of the urethra at the site of urethrotomy were then approximated by two sutures and the indwelling catheter used as a splint for the repair. The external perineal wound was then closed with absorbable sutures and the suprapubic wound repaired in the usual manner with an indwelling tube. A No. 30 French Pezzer catheter was placed in the bladder and the walls of that structure everted about the tube. A rubber tissue drain was placed in the space of Retzius, the rectus fascia was closed and the skin sutured in the usual manner.

On the day following operation clear urine was noted to be leaking about the suprapubic tube. Suction was applied on the next day and the wound remained dry. Progressive healing occurred and in time the suprapubic catheter was removed and the wound closed spontaneously. The urethral catheter was removed in about three weeks and it was then possible to pass a No. 18 French urethral catheter into the bladder with ease. About one month after operation the urethral stricture was dilated through

a No. 22 French sound and this was subsequently carried up to a No. 26 French sound. Three months after operation the patient reported that he was voiding easily and was entirely asymptomatic. The stricture was well dilated and his general condition was excellent.

SUMMARY

1. War wounds of the urinary tract are not essentially different from wounds sustained in civilian life.
2. Treatment must be guided by established surgical principles. Free drainage must be provided and an attempt to reestablish the urinary passage made.
3. Small wounds in the region of the upper thighs and groins must be suspected of association with injury to the urethra until proven otherwise.
4. Proper evaluation of the severity of urethral injury at the time of initial examination is difficult.
5. These patients must be given proper supportive treatment. The administration of whole blood and plasma may be necessary to prepare the patient properly for operation. The minutiae of surgical care are most important and a poor result may be obtained if any are neglected.

REFERENCES

Bailey, H., editor: Surgery of Modern Warfare, Edinburgh, E. & S. Livingstone, 1941.

BORDER HEALTH CONFERENCE

Colonel Joseph F. Sadusk, Jr., M. C., Executive Officer of the United States of America Typhus Commission, and Lieutenant Colonel Douglass W. Walker, M. C., Executive Officer of the Preventive Medicine Service, Office of The Surgeon General presented papers and discussed problems in preventive medicine of concern to the Army at the third annual conference of the United States-Mexico Border Public Health Association which was held at El Paso, Texas, on May 14 and 16, and at Juarez, Mexico, on May 15.

Colonel Sadusk, speaking on "Recent Advances in Treatment and Control of Typhus Fever," stated that there has not been a single death from epidemic typhus in the Army since the beginning of the war. He further stated that—directly due to recent advances in its control—there have been less than 50 cases of epidemic, louse-borne typhus in the Army during this war. This record was achieved despite the fact that our forces have been constantly exposed to the disease in many areas of the world.

Colonel Walker spoke on the preventive medicine program of the Army. This, he said, comprised: (1) general health measures, which are concerned with the selection of healthy recruits and include proper clothing, shelter, food and sanitation; (2) specific health measures, designed to protect the soldier against infections with specific diseases; and (3) a medical research program which recognized the need for scientific laboratory and field research in order to develop better methods for the control and prevention of disease. As a result of the Army's preventive medicine program, he said, no major epidemics have occurred in the Army, and the successful conservation of manpower through the prevention of infectious diseases has been an important factor in our military successes.—S. G. O. News Notes, May 31, 1945.

AN IMPORTANT FOOT FAULT

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The feet are of little or no interest to the individual until they begin to ache. Then he soon becomes a very unhappy person. It is during this painful period that shoes, appliances, and various efforts are made to relieve the annoying distress. The purpose of this discussion is to emphasize that which appears to me to be the greatest foot fault, which we assume without a conscious realization that any disagreeable features will result. The fault is walking almost entirely on the lateral portion of the foot and "taking off" in the walking effort from the third, fourth, and fifth metatarsal heads and not utilizing the support offered by the first and second metatarsals. In discussing the subject, congenital malformations and pathologic conditions, as such, will not be considered. Attention will be given to the forces which tend to alter the dynamic stability of the average normal foot.

It is desirable to know that the primitive foot presents an active grasping control of the great toe which requires voluntary contraction of the abductor and adductor hallucis muscles. The existence of this leads to our unconscious effort to grasp the walking surface (Fig. 1*a* and *b*), which results in over development of the adductor hallucis (Fig. 1*c*) and eversion of the forefoot. This interferes with the mechanical support of the foot as contributed by the flexor hallucis, the tibialis anterior, the tibialis posterior, and many ligaments. The undue strain thus placed on the plantar calcaneonavicular ligaments soon affects the mid-tarsal support. This may or may not result in the pronated type of foot, but pain is usually the barometer of the change in mechanical stability, and the heels of the shoes start to "run over" on the outside.

The changes following the first stage are affected by the mobility and elasticity of the individual foot. In the usually non-rigid adolescent, the plantar calcaneonavicular ligament may yield and allow the head of the talus to tilt downward; in the inelastic foot, non-yielding ligaments and mortised bones encourage walking on the third, fourth, and fifth metatarsals, and the second cycle is complete. The x-ray study usually shows structural hypertrophy (Wolff's law) of the shaft of the second and third metatarsals. (March fractures are a clinical example of this stage). An examination of the shoes

From the Department of Surgery, Orthopedic Division, University of Texas School of Medicine, Galveston.
Read before the Section on Surgery, State Medical Association of Texas, San Antonio, May 3, 1944.

usually tells the whole cycle. The heels are worn down on the lateral sides, as are the soles of the shoes. The foot bulges the shoe and hangs over the lateral sole margins and the creases of the shoe are oblique instead of transverse in the metatarsophalangeal area (Fig. 2*a*, *b*, *c* and *d*).

Then follows the complete transferring of weight distribution from the first and second metatarsals to the third, fourth, and fifth. As this progresses the overacting abductor of the great toe causes a hallux valgus; a heavy weight-bearing pad develops on the lateral side of the foot (Fig. 3*a*) and calluses (Fig. 3*b*) appear in the mid-tarsal area. The continued effort to relieve pain by walking on the outside of the foot is aggravated by contraction of the extensor muscles of the toes, which makes the deformity worse and produces hammer toes of varying degrees. The skin on the so-called ball of the foot shows little hypertrophy or callus evidence of normal weight bearing. This foot is usually a painful foot. The heel remains relatively stable statically through the progress of the condition but dynamically inversion is practiced. The shoes are extensively worn on the lateral sides of the heel and sole.

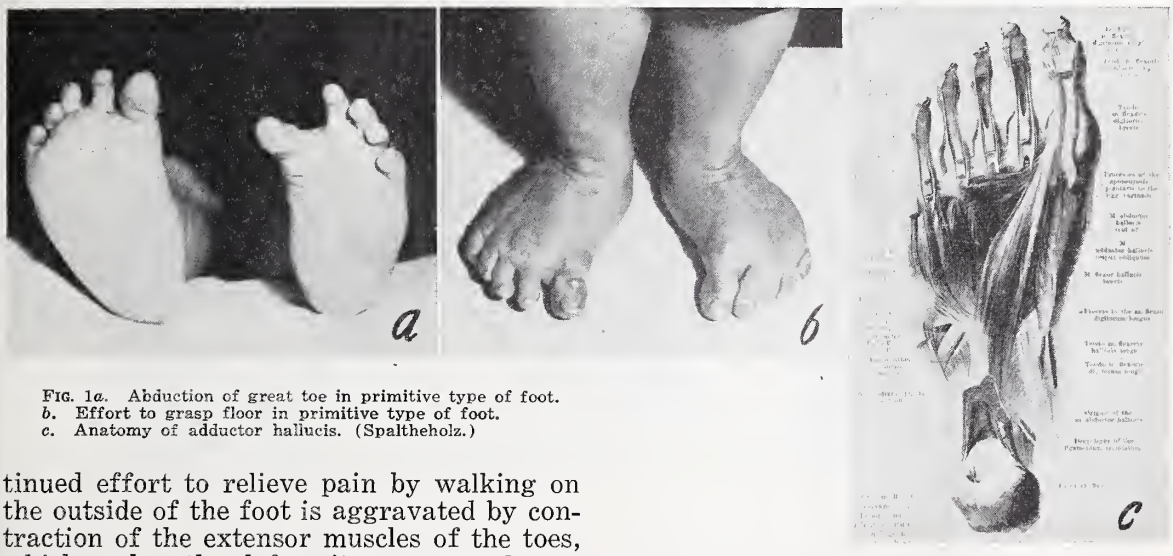

FIG. 1*a*. Abduction of great toe in primitive type of foot.
b. Effort to grasp floor in primitive type of foot.
c. Anatomy of adductor hallucis. (Spaltheholz.)

The above is a brief summary of the changes which occur. Our usual conception of the foot is its appearance as a static mechanism. This, I believe, must be changed. We must see in each foot, with calluses and bunions, a beautiful machine which has operated inefficiently and created scars of that dynamic abuse. It really matters not whether the so-called arches are present. The elastic foot, whether so-called flat or not, may be dynamically efficient in motion because of properly coördinated muscular balance. In contrast the static, well-formed foot may be dynamically bad and painful because of muscular imbalance. This latter type is more frequently seen in painful feet.

Many persons blame the shoes they wore at some past date for all of their foot pain. This cannot be entirely disregarded. The average person walks in his shoes instead of on the sole of the shoes. Note how many shoes, especially women's shoes, in which the sides bulge over the sole margins. The pointed shoe crowds the toes and the high feminine heel alters the weight bearing through the tibia, talus, and calcaneus with a thrust on the inferior articular surfaces of the metatarsal heads, which should never bear weight. The shoe problem is unfortunate.

The two extreme clinical end results are: (1) the collapsed or extreme flat foot with bunions, hammer toes, calluses, shortened tendo Achillis; (2) the foot of architectural osseous support with bunions, a preservation of the so-called longitudinal arch, hammer toes, calluses, and large lateral metatarsal walking pad.

The effort to relieve painful feet has resulted in all types of shoes: special individual construction; arch (?) supports, and all manner of contraptions and devices. One needs only to reflect on this phase of feet, and he will realize the economic waste and magnitude of the subject. Perhaps more attention would be given the condition if it had a mortality rate. It does have an economic mortality rate and a too high disability rate for military services.

The most important foot fault may be described as the unconscious acceptance by each individual of the foot-grasping evolutionary tendency, and failure to develop a conscious effort to utilize the mechanical stability offered by the great toe and its supporting structures for environmental accommodation. Since the latter can be taught

and learned by voluntary effort, it should be the best way of achieving the desired end. This method we usually call prophylactic or preventive, and the group in which such an approach would be most effective is the one in the formative years, that is, the teen age. Our present ideas of teaching muscular development is playing games when no doubt better results would follow if muscular control of separate muscles were taught and its significance stressed. This applies to the feet; and the person who could pick twigs with his toes as a child, cannot even wiggle his big toe at the age of adolescence. These children can be taught voluntary control over the muscles of their feet and thus create a balanced, dynamic, and serviceable foot. The height of the so-called arch is not a guide to what the condition of that foot will be twenty years later, especially if abused by muscular incoördination.

The problem is what should be done after the patient has acquired the painful foot. All of these persons fail to bear the proportionate weight on the first and second metatarsal heads. Since they will not place this part of the foot on the floor, then the floor should be brought to the foot. This is done by raising the medial side of the shoe properly or making supports which accomplish the same condition and placing them in the shoe. The type of support varies—steel, leather, cork, rubber, *et cetera*, but if it will cause the person to create a favorable weight-bearing thrust, the support will be satisfactory; if it does not, it fails. Many supports are made on static feet or casts and often fail unless they create the muscular balance required in the dynamic effort of walking.

The selection of a well made shoe of proper size and support for the patient to walk on and not in, is a necessary part of the corrective procedure.

The importance of proper balance of the foot has a broad application. No matter

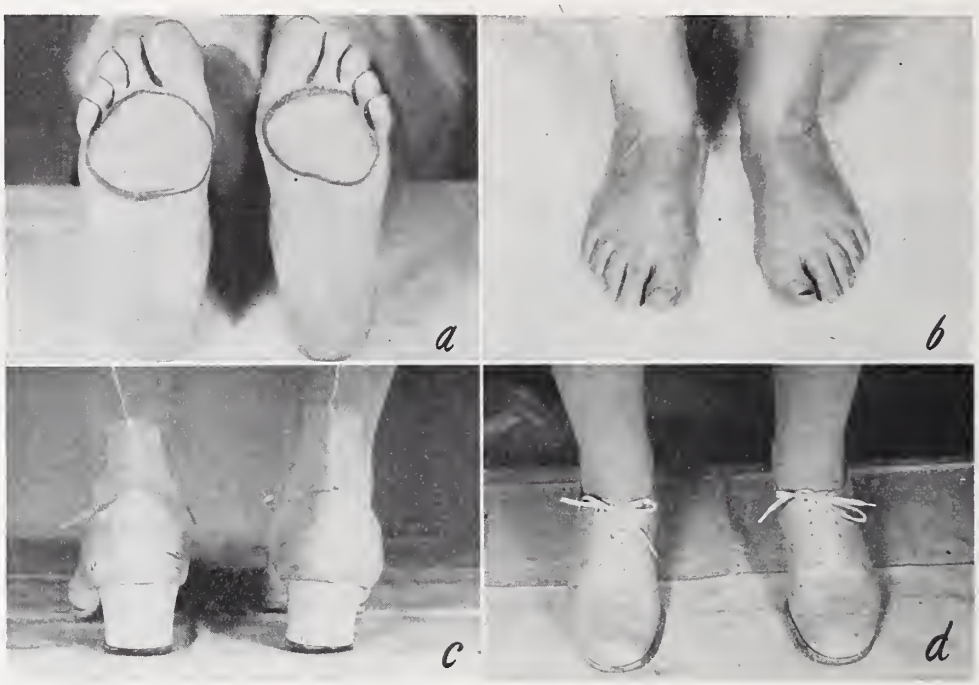

Fig. 2*a*. Painful area outlined in early case.
b. Early indications of adduction of great toe.
c. Typical shoes of "walking on outside of foot." Note the "interference" indicated by marks on shoes.
d. Note wearing of sole on outside and bulging of foot over sole margin.

Fig. 3*a*. Showing weight distribution on the lateral side of foot.
b. Callus areas in typical foot with walking fault.

what pathologic condition of the foot we are treating, we ultimately reach the stage of active use of the foot. Proper application of the basic principles of equalized, coördinated weight-bearing on the proper, responsible structures of the foot in its dynamic activity will secure a satisfactory foot.

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ABSTRACT OF DISCUSSION

Major Louis W. Breck, M. C., Camp Swift, Texas: Dr. Egger's paper interested me very much and I agree essentially with everything he said. I am very much in favor of simplification of the foot problem rather than the common tendency to make it seem very complicated. I would like to ask Dr. Eggers to elaborate on his method of educational treatment in adolescents.

Dr. Ben L. Schoolfield, Dallas: There is one point made by Dr. Eggers with which I wish to agree most heartily—that there is nothing *static* about the feet, that they are very *dynamic* organs. When textbooks and others speak of "static deformities" of the feet, they are talking pure nonsense. I do not like the use of the terms *pronation* and *supination* in connection with a description of the attitudes of the feet. I am fully aware of the fact that it has been done before, of course. Nevertheless, those terms are correctly applied to *movements* and attitudes of the forearm rather than to positions or attitudes of the feet. I do not follow Dr. Eggers' reasoning when he states that raising the inner, or medial, borders of the heels and/or soles shifts the weight to the medial borders of the feet. It does precisely the contrary thing of throwing it on the lateral borders of the feet, as taught long ago by Dr. Royal Whitman and others. The principle is correct in the alleviation of symptoms of weak feet; however, I believe I have shown conclusively that flatfoot, or weak foot, is caused by a too long deltoid ligament, but that was brought out in my article as published in the *Annals of Surgery* some five years ago, and there is not time to discuss it fully at this time.

SULFADIAZINE EFFECTIVE IN PNEUMONIC PLAGUE

A sulfanilamide derivative—sulfadiazine—brought about the recovery of a physician suffering from the rare but usually fatal pneumonic plague, Edgar J. Munter, M. D., of the U. S. Public Health Service, San Francisco, reports in the May 26 issue of *The Journal of the American Medical Association.*

"As far as I am aware," Dr. Munter says, "this case is the first to be reported in which primary pneumonic plague has been treated by the use of sulfadiazine and the patient has recovered."

The physician who suffered from this form of plague involving the lungs had been engaged in research investigations at the Plague Investigation Station of the U. S. Public Health Service in San Francisco.

In addition to the large doses of sulfadiazine, the patient was also given penicillin, but Dr. Munter says that "there was no evidence that the administration of this drug altered the course of the disease."

Pneumonic plague, caused by a germ, is an infectious disease of an extremely virulent nature, and is usually fatal. Although it is comparatively rare in the United States, several cases were reported in 1924.

VERATRUM VIRIDE IN THE TREATMENT OF PREECLAMPSIA, ECLAMPSIA, AND OTHER HYPERTENSIVE SYNDROMES OF PREGNANCY

A PRELIMINARY REPORT

JAMES E. HARKINS, A. B., M. D.
DALLAS, TEXAS

In spite of extensive clinical and experimental investigation by a vast number of workers, the etiology of toxemia of pregnancy remains obscure. We know that the presence of the living child in utero inaugurates marked alterations in the metabolism, anatomy, and physiology of the maternal organism, and in toxemia many of these alterations become more marked. According to Stander, these various departures from the normal may be specifically linked up with the etiology and course of the different toxemic disorders. In the light of extensive investigations we are understanding more and more of the pathological physiology which precedes and accompanies toxemias of pregnancy.

There is considerable evidence now gathered to substantiate the belief that many of the clinical and pathological findings in toxemia are immediate or remote effects of a generalized abnormal vasoconstriction of most or perhaps the entire arteriolar tree.

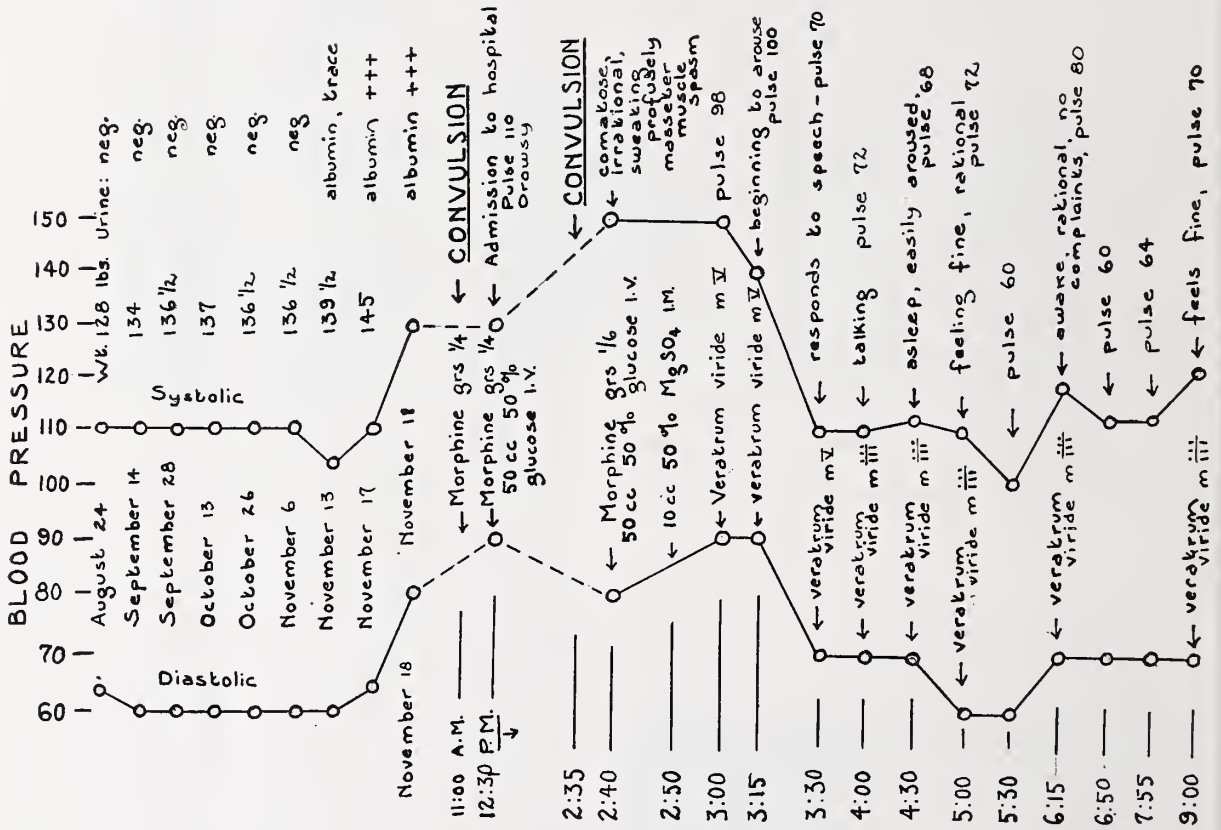
Irving[7] states that "there is considerable evidence that the disease is vascular in nature and may best be explained on the basis of arteriolar spasm. Of late years the conviction has grown that eclampsia and its precursor, preeclampsia, is not a disease of any individual organ, but an affection of all the small terminal arterioles." This concept was first advanced by Volhard in 1918, and has been accepted by Hynemann, Hinselmann and Fahr in Germany, and in this country by Irving, Mussey, Herrick, Beck, Eastman and others. To quote Mussey,[9] "The concept of the presence of spasm of the arterioles as the predominant factor in the production of hypertension in the acute toxemias of pregnancy has been generally accepted." Eastman[4] believes that arteriolar spasm is the "common and dominant factor throughout the toxemias of late pregnancy," and further states that when the cause of the arteriolar spasm is determined, the long-sought primary cause of eclampsia will probably be unveiled. The arteriolar spasm in toxemia patients can be visualized by ophthalmoscopic examination of the eye grounds.[15, 10] Vascular spasm has been demonstrated in the capillaries at the nail bases.[7]

From the Florence Nightingale Lying-in Hospital, Dallas, Texas.
Read before the Section on Obstetrics and Gynecology, State Medical Association of Texas, San Antonio, May 4, 1944.

According to Beck[1] the character of the pathological lesions of toxemia varies in different organs of the body, depending upon the terminal circulation in the organs. Many hypotheses have been advanced concerning the cause of this arteriolar spasm. Mussey believes the spasm to be due to the angiogenic effect of a pressor substance circulating in the blood. Hofbauer[6] believes that the pathogenesis is based on a heightened activity of post-pituitary principles in the pregnant organism, sensitized by split-products of proteins, as derivatives of disintegrated syncytial elements. As yet none of these hypotheses have been proved to the satisfaction of a majority of observers. This spasmodic constriction of the arteriolar bed causes the blood pressure to rise, and according to Bryant and Fleming[2] by interfering with the interchange of oxygen and metabolic products, produces edema and eventually secondary changes. This widespread arteriolar spasm is of paramount importance in the pathogenesis of toxemia, and in all respects, this abnormal change in vascular tonicity is detrimental to the maternal organism. In the treatment of toxemia the use of a drug to counteract the arteriolar spasm, therefore, seems fundamentally rational. A therapeutic regime which includes a vasodilating drug in addition to the usual measures serving to dehydrate the interstitial tissues will be presented.

Most conservative methods of treatment in toxemia include the induction of labor at an opportune time. It is now generally recognized that the toxemia should be treated first, and the pregnant uterus disregarded until the toxemia is brought under control. Induction of labor, accouchment force, and cesarean section prior to medical treatment frequently aggravates the disease. The first and most important step in the management of toxemia is prophylaxis. Proper prenatal care has greatly reduced the incidence and severity of the disease. In mild toxemias occurring late in pregnancy the judicious induction of labor is a therapeutic measure of great value and is employed in most clinics. When mild toxemia appears earlier, and the child is not yet viable but may become so in a few weeks, one is justified in temporizing, providing severe symptoms do not develop. However, in spite of adequate prenatal care a certain number of severe preeclamptic and eclamptic syndromes occur. In addition to these cases, representing the irreducible

CHART 1.—*Antepartum Eclampsia (38 weeks gestation).*



minimum, the obstetrician receives confinement cases where inadequate or occasionally no prenatal care has been administered. It is in these more severe toxemias that the ingenuity of the obstetrician is taxed to the highest degree and where adequate medical and obstetrical management becomes a life saving procedure.

Many years ago the control of eclamptic seizures was accomplished with veratrum viride. DeLee states that Dr. Baker of Eufala, Alabama, in 1859 was the first to use veratrum viride in this condition. He was followed by King in 1865, Fern in 1871, Jewett in 1887, and many others. These men used the tincture of veratrum viride and it is interesting to note that the drug enjoyed its greatest popularity during an era which antedated the advent of the first practical sphygmomanometer (1905). This form of therapy fell into disrepute after untoward effects of the tincture were observed. The drug was later popularized in Cincinnati, Ohio, by Zinke who was quite enthusiastic about its value. The work of Zinke was carried on by Gillespie, Woodward, *et al.* In 1940 Bryant and Fleming[2] published results of a therapeutic regime which stressed the use of veratrum viride in the control of eclampsia. They reported a consecutive series of 120 eclamptic patients with two maternal deaths, neither of which was due to eclampsia. Their uncorrected mortality rate of 1.7 per cent is the lowest yet reported in a sizeable series. Bryant and Fleming used a purified aqueous solution of veratrum viride, known as Veratrone (Parke Davis & Co.). The same preparation is being used at the Glasgow Royal Maternity Hospital, at the Aberdeen Maternity Hospital and by the Hamiltons of Kansas City. The therapeutic regime employed in this series is patterned after that described by Bryant and Fleming.

From July 1, 1942, to April 1, 1944, a period of 21 months, there were, in the Florence Nightingale Lying-in Hospital, Dallas, Texas, and its associated charity obstetrical service, 6,042 obstetrical admissions. During this period of time there were 5,258 deliveries in the hospital and 836 deliveries in the home, a total of 6,094 deliveries. From this group of obstetrical cases came the toxemia patients treated in this series.

We define severe preeclampsia as that type of toxemia occurring most frequently in the third trimester of pregnancy and characterized by two or more of the following symptoms or signs being rather marked in degree:

(1) Hypertension;
(2) Vascular symptoms (headache, visual disturbances, insomnia, epigastric pain);
(3) Edema (occult or clinical);
(4) Albuminuria;
(5) Rapid and excessive weight gain;
(6) Diminished output of urine;
(7) Elevation of blood uric acid.

We consider severe preeclampsia and eclampsia as being the same disease entity. In the absence of effective and adequate treatment severe preeclampsia may result in the more severe and advanced form of the disease and terminate in convulsions. With the onset of convulsive seizures the prognosis for both mother and infant immediately becomes more grave.

The therapeutic regime employed in this series consisted of the following:

(1) Rest in bed;
(2) Forcing of fluids (fruit juices, skimmed milk, and water);
(3) Salt free diet (usually high in carbohydrate and low in protein);
(4) Dehydration of interstitial tissues with hypertonic glucose intravenously, supplemented by magnesium sulphate, orally and parenterally;
(5) Veratrum viride by frequent small hypodermic injections;
(6) Withholding of heavy sedation.

This therapeutic plan was followed in most of the toxemia patients. However, we are limiting this report to the severe preeclamptic and eclamptic syndromes.

DISCUSSION OF TREATMENT AND COMMENT ON THE CLINICAL EFFECTS OF VERATRUM VIRIDE

In preeclampsia the index of therapy was the disappearance of toxic symptoms, the production of diuresis with diminution and ultimate disappearance of the edema, and the maintenance of the blood pressure and pulse at significantly lower levels. These results were obtained by a combined therapeutic regime. The patient was kept at rest in bed. Fluids were forced; water, fruit juices and skimmed milk were given by mouth and hypertonic glucose solution by vein, with a total daily fluid intake of 3,000 to 4,000 cc. being considered as adequate. Twenty per cent glucose in distilled water was administered in 500 cc. amounts, giving three venoclyses during the first twenty-four hours, two venoclyses each day following and gradually discontinuing the infusions in accord with clinical improvement. The administration of hypertonic glucose in this disease is now generally accepted as being of sound principle, and as Dieckman emphasizes, "the proper use of hypertonic solutions of glucose in pregnancy is one of the outstanding accomplishments of modern obstetrics."

The diet was salt free, usually high in carbohydrate and low in protein. Magnesium

sulphate was given both orally and intramuscularly. Enough magnesium sulphate was given orally to produce at least two and preferably three defecations a day. By the intramuscular route a 50 per cent solution of magnesium sulphate was administered, usually giving from 20 to 26 cc. in the first twenty-four hours, and from 10 to 16 cc. each day during the next two days. It was seldom found necessary to continue the intramuscular injections beyond the third day. The largest amount given within a twenty-four-hour period was 30 cc. Pain at the site of injection was the only undesirable effect noted in giving these injections. One sterile gluteal abscess occurred, which cleared up promptly following incision and drainage.

Veratrum viride was given in frequent and small doses, the frequency and dosage depending upon blood pressure, pulse, and clinical conditions of the patient. The response to an injection of veratrum viride varies in different patients and therefore dosage must be individualized according to its effect. The effects of repeated hypodermic injections of veratrum viride include a lowering of the blood pressure, slowing of the pulse, increase in urinary output, sometimes diaphoresis, and most important of all, clinical improvement of the patient. In the very severe preeclamptic syndromes veratrum viride was given at intervals of one to two hours. As clinical improvement progressed the time interval was lengthened. In the moderately severe cases it was given at two to three hour intervals and in some at four hour intervals. After clinical improvement was manifest and diuresis was established an injection at four hour intervals was usually quite adequate.

Blood pressure and pulse determinations were always made prior to administration of the drug, and dosage was adjusted in accordance with the findings. The pulse rate was carefully followed since one of the most marked and immediate effects of the drug is a slowing of the pulse. It is not believed advisable to maintain the pulse at a rate below sixty per minute. A transient fall of the pulse below sixty per minute has not proven harmful, but, when this occurred, subsequent injections were given at less frequent intervals and in smaller dosages in order that bradycardia would not be maintained. A pulse rate of 60 to 70 per minute was considered ideal in a toxemia patient under this form of treatment and it is interesting to note that convulsions in toxemia seldom occur when the pulse is below 80 per minute, a phenomenon noted over a half century ago and subsequently substantiated by many observers. A lowering of blood pressure occurs after an injection of veratrum viride and this lowering is somewhat in proportion to the slowing of the pulse. The dosage of veratrum viride (Veratrone) employed in this series varied from 2 to 10 minims but was usually given in the smaller dosages, averaging from 3 to 5 minims. The blood pressure was never maintained at a level below that considered normal for the individual. The lowering of blood pressure and slowing of pulse was the chief index as to the frequency and dosage of the drug.

In this series no harmful effects were observed from the use of veratrum viride and the following were considered to be indications that the maximum dosage had been used: (1) slowing of the pulse to a rate below 60; (2) lowering of blood pressure to a level below that considered normal for the patient; (3) generalized weakness with pallor. To the unitiated observer these effects might be alarming, yet they simply indicate that a maximum dosage has been administered and that the subsequent injections should be somewhat smaller. Veratrum viride caused nausea and vomiting in some of these cases but this reaction usually subsided after one episode of emesis.

In convulsive seizures, 5 to 10 minims of veratrum viride were given hypodermically at appropriate intervals varying from ten to thirty minutes. The subsequent dosage was determined by the response of convulsions, blood pressure, and pulse to the preceding injection. The initial injection of veratrum viride was immediately followed by 10 cc. of 50 per cent magnesium sulphate intramuscularly and 50 cc. of 50 per cent glucose intravenously. When 10 minims of veratrum viride was used as the initial dosage, subsequent injections were usually smaller, averaging 3 to 6 minims. With repeated injections of veratrum viride the pulse was brought down to 70, preferably 60 to 70, if the accompanying blood pressure reduction was not excessive. After convulsions subsided the blood pressure was maintained at a lower level, considering a diastolic pressure of 75 to 85 as ideal, and the pulse was maintained at a rate of 60 to 75 by small injections of veratrum viride, 3 to 5 minims, at intervals of one-half to two hours.

After consciousness was regained and toxic symptoms decreased, the time interval of the injections was prolonged accordingly, and the administration of hypertonic glucose and magnesium sulphate was the same as in the preeclamptic cases. The usual precautions were exercised with a patient during convulsive seizures. In most cases sedation was found unnecessary. In one case an injection of morphine was given following the first injection of veratrum viride because of ex-

treme jactitation following the convulsion. In another case 2 cc. of sodium amytal was given intravenously because of extreme jactitation in the early post convulsive period. With these two exceptions sedation was not deemed necessary. The number of convulsions occurring after the onset of therapy depended largely upon the frequency of the convulsions prior to the onset of treatment. In cases where the convulsions were twenty to thirty minutes or more apart, treatment usually prevented further seizures. In cases where the convulsions were close together, the few convulsions occurring after the onset of therapy were successively less severe in character until total cessation occurred.

The clinical response to this combined therapeutic regime was often dramatic in effect. In a few minutes the blood pressure was brought down by 30 to 80 mm. of mercury, reaching as low as 90 systolic pressure, and the pulse dropped more or less in proportion, sometimes to a rate below 60 per minute. The convulsions became less severe and soon subsided. Consciousness was soon regained. The lowest pulse obtained in this series was 48 per minute with no apparent detrimental effects, and the pulse volume remained good. In this series it was never found necessary to use an antidote to counteract the effects of veratrum viride. There were no cases of vascular collapse. The usual tendency to vascular collapse following parturition in toxemia patients was carefully watched for but never occurred in these well stabilized patients.

The usual problem of induction of labor was encountered in the preeclamptic and antepartum eclamptic groups of patients. Clinical improvement was carefully evaluated from day to day and when the toxemia was well under control the induction of labor was begun in a gradual and systematic manner.

Spontaneous onset of labor occurred in 42 per cent of the severe preeclamptic patients. Medical induction* alone was successful in 15 per cent of this group. Medical induction followed by fractional doses of pitocin was successful in 27 per cent. Thus in 84 per cent of the severe preeclamptic patients the induction of labor did not present a problem. (Table I).

TABLE 1.—*Method of Induction of Labor.*

	Severe Preeclampsia	Antepartum Eclampsia
Spontaneous onset of labor	14	1
Medical induction*	6	1
Medical induction plus Pitocin	9	1
Hysterotomy (six months gestation)	0	1
Rupture of membranes	4	1
Voorhees bag	0	1
Bougie	1	1
Cesarean section	0	0
Cases	34	7

*Three ounces of castor oil followed by a hot enema 1½ hours later. Buckle binder applied to abdomen after the first bowel action.

In 12 per cent of the cases rupture of the membranes was followed by labor. In only 1 case was the Voorhees bag employed. In table 1, column 2, the method of induction of labor in the antepartum eclamptic patients is indicated.

The toxemia patient in labor requires close supervision, since labor may precipitate convulsions. The frequency of veratrum viride injections was increased as well as the dosage. In some cases supplementary injections of hypertonic glucose were employed. After delivery of the infant careful vigilance of the mother was exercised, especially during the first three days, since postpartum convulsions can occur anytime during this period. During the postpartum period injections of veratrum viride usually were given at four-hour intervals for the first four or five days. Following this period of hypodermic injections, veratrum viride was then given by mouth every four hours for two or three days and then discontinued. The dosage by mouth varied from eight to twenty drops.

RATIONALE IN THE USE OF A VASODILATOR

If the abnormal phenomenon of vasoconstriction in toxemia is correct, and we are now led to believe so, then the hypertension which is such a constant finding becomes a simple physical fact and the therapeutic effectiveness of veratrum viride is easily explained since this preparation acts pharmacologically as a vasodilator.[5, 8, 3, 14] It is no longer necessary to accept the theory that hypertension, *per se*, in toxemia is a protective or defensive phenomenon. In like manner we have come to believe that the generalized vasospasm is actually detrimental, followed as it is by diminution in vital circulation with tissue anoxia, incomplete tissue metabolism, incomplete removal of catabolic material, increasing accumulation of edema fluid in the interstitial tissues and terminally resulting in pathological changes in vital organs.

It is thought that veratrum viride acts by counteracting a widespread vasoconstriction. Dilatation of the small arterioles throughout the body, which follows the administration of therapeutic doses of veratrum viride, creates a more normal blood supply to the body tissues, including the vital organs; and as a result of this improved blood supply various therapeutic adjuncts such as hypertonic glucose and magnesium sulphate have more ready access to the edematous tissues. It is important to realize that veratrum viride is not used for the single purpose of overcoming

high blood pressure, and that the primary function of the drug is to produce widespread vasodilatation with the ensuing beneficial effects.

Although the lowering of blood pressure through the use of this drug is of secondary importance, this phenomenon is at times of therapeutic value, especially in some cases where the blood pressure elevation is so severe that the heart cannot help but be overloaded by increased peripheral resistance. The arteries of the brain and pelvis are subjected to such pressure that accidental hemorrhage may occur. The danger of cerebral complications in toxemia has recently been emphasized by several writers. In reference to this complication Parks and Pearson[11] state:

"In severe toxemias of pregnancy, attention should be focused on the manifestations reflected in the most vascular and vital of the body tissues, namely, the brain, liver, and kidneys. Cerebrovascular changes of arteriospasm and edema give rise to headaches, visual and auditory disturbances, convulsions, and paralysis. If these are recognized early and treated properly, intracranial hemorrhage may be prevented."

In producing a generalized vasodilatation we believe veratrum viride and parenteral magnesium sulphate are synergistic in action. The vasodilating action of magnesium sulphate is substantiated by the reports of Rubin and Rapaport[12] who have shown that magnesium sulphate, in addition to its mild sedative action, diminishes hypertension by relaxing vasospasm through local action on the smooth muscle of the small vessels. To further substantiate the effects of vasodilatation in toxemia we note the beneficial results obtained by Siever and Mousel[13] in eclampsia where continuous caudal anesthesia was employed. In these cases the vasodilatation was due to the anesthetic agent.

DISCUSSION OF CLINICAL RESULTS

This report includes all eclamptic patients occurring within the twenty-one months extending from July 1, 1942, to April 1, 1944.

There were two cases of eclampsia reflectorica in which special treatment was unnecessary. Both of these cases are excluded from the series since the condition is not regarded as toxemia. The majority of severe preeclamptic syndromes occurring during this time was treated by this method. In the treatment of severe grades of toxemia the prevention of convulsions is of paramount importance. Only one patient among the severe preeclamptic group developed eclampsia under this form of therapy. A brief resume of this case follows:

An eighteen-year-old primigravida was admitted to the hospital at approximately 38 weeks gestation, with complaints of dizziness, headaches, generalized swelling and high blood pressure. On admission the edema was generalized, headache throbbing in character, blood pressure 170/100 and pulse of 64. Urinalysis on admission was negative. Plasma protein was found to be reduced to 5.35, with a reversal in the A/G ratio. Treatment was begun soon after admission. The injections of veratrum viride were greatly limited by a bradycardia, which appeared after the first injection. The subjective symptoms were relieved to a moderate degree but a slight headache persisted. Forty-eight hours after admission the patient had one light convulsion. This convulsion was atypical in that the patient remembered everything before and immediately after the seizure. Following this episode treatment was more vigorous. Bradycardia persisted and small injections of veratrum viride were given in spite of this, but diuresis could not be obtained. The clinical condition of the patient improved during the next twenty-four hours and when it was seen diuresis could not be obtained, medical induction of labor was tried and was followed by an uneventful labor, delivery, and postpartum course. Diuresis occurred promptly following delivery.

In this case we were unable to give enough veratrum viride to significantly lower the blood pressure or obtain an adequate degree of vasodilatation. In the remainder of the eclamptic patients, veratrum viride was not given prior to the onset of convulsions.

Among the 14 cases of eclampsia, seven (50 per cent) had no convulsions after the onset of treatment. Three patients had one convulsion and two patients had two convulsions. Thus in twelve of the patients (85 per cent) control of the convulsions by this method was readily obtained. (Table 2).

TABLE 2.—*Number of Convulsions After Onset of Treatment.*

	Number of Cases	Per Cent	Cumulative Per Cent
No convulsions	7	50	
One convulsion	3	21	71
Two convulsions	2	14	85
Three convulsions	1		
Four convulsions	1		
Five or more	0		
	14		

The time required to control convulsions is shown in table 3. Ten of the 14 cases were under control within thirty minutes.

TABLE 3.—*Time Required for Control of Convulsions.*

	Cases
No convulsions after treatment started	7
Convulsions controlled within 15 minutes	2
Convulsions controlled within 30 minutes	1
Convulsions controlled within 60 minutes	3
Longer than one hour required	1
	14

The method of inducing labor is shown in table 1, and the methods of delivery in table 4. Two therapeutic abortions were performed in the eclamptic series, none in the preeclamptic. Both of the therapeutic abortions were in pregnancies of about six months

duration, one by abdominal hysterotomy and one by vaginal delivery.

TABLE 4.—*Methods of Delivery.*

		Number of Cases
Antepartum eclampsia		7
Spontaneous delivery	3	
Forceps delivery	2	
Therapeutic abortion		
Abdominal hysterotomy	1	
Vaginal delivery	1	
Cesarean section	0	
Intrapartum eclampsia		4
Forceps delivery	3	
Craniotomy for hydrocephalus	1	
Cesarean section	0	
Postpartum eclampsia		3
Spontaneous delivery	2	
Forceps delivery	1	
Cesarean section	0	
		14
Severe preeclampsia		34
Vaginal delivery	34	
Cesarean section	0	
Therapeutic abortion	0	

Infant mortality is tabulated in table 5. No stillbirths occurred in the preeclamptic group of patients. Among the 34 preeclamptic patients, 37 living infants were obtained, only 2 of which died during the neonatal period; of these fetal deaths one was caused by prematurity and the other was believed to be caused by toxemia. Excluding the two therapeutic abortions performed at six months

TABLE 5.—*Infant Mortality in Toxemia.*

	Preeclampsia	Eclampsia
Number of infants born alive	37	12
Number of infants stillborn	0	3
Number of neonatal infant deaths	2	1
Sets of twins	3	1
Cause of stillbirths:		
Craniotomy for hydrocephalus, one case.		
Toxemia in addition to difficult forceps, one case.		
Macerated fetus, six months therapeutic abortion, one case.		
Cause of neonatal deaths:		
Prematurity, one case.		
Toxemia, one case.		
Previability, therapeutic abortion, one case.		
Infant mortality rate	0%	15.3%
Corrected infant mortality rate		7.6%
(Correction by exclusion of two therapeutic abortions and one hydrocephalic infant.)		

gestation and the one hydrocephalic infant, there was only one infant lost because of eclampsia.

Morbidity is tabulated in table 6. Sepsis occurred in one preeclamptic patient and was believed to have resulted from a pre-existing recto-vaginal fistula. Recovery was uneventful. An E. Coli septicemia developed in one of the eclamptic patients. Recovery was slow but complete.

OTHER HYPERTENSIVE SYNDROMES TREATED IN PREGNANCY WITH VERATRUM VIRIDE

Veratrum viride was also employed in other hypertensive syndromes occurring in pregnancy, including 3 cases of benign hypertension, 2 cases of hypertensive vascular renal disease, 4 cases of rather marked renal disease, 1 case of subarachnoid hemorrhage associated with an unclassified hypertension,

TABLE 6.—*Morbidity in Toxemia.*

	Preeclampsia	Eclampsia
No morbidity	27	7
Morbidity	3	3
One day fever	2	0
Intrapartum fever	1	2
Intrapartum fever plus morbidity	0	1
Sepsis	1	1
	34	14

Intrapartum fever: 100.4 F. or over during labor.
One day fever: 100.4 F. or over one day after the first 24 hours.
Morbidity: 100.4 F. or over on any two days after the first 24 hours.

and 1 unclassified hypertension with intracranial hemorrhage. Among these 11 cases there were two maternal deaths. Since these cases are of special interest a brief resume of several, including the two maternal deaths, will be presented.

CASE HISTORIES

CASE 1.—A 17-year-old Negro primigravida was first seen at 8 months gestation and was hospitalized for study of a hypertension. Urinalyses were negative. There was no edema and no symptoms or complaints. The blood pressure responded well to bed rest and light sedation. She was discharged from the hospital but failed to return for further prenatal care. She was readmitted to the hospital at term in labor. Urinalyses were negative; there were no complaints or edema. Hypertension of a moderate degree responded fairly well to hypodermic injections of veratrum viride. After a prolonged labor a low cervical cesarean section was performed for a cephalopelvic disproportion. The postoperative course was immediately stormy with a septic type of temperature curve. She failed to respond to therapy, including blood transfusions and sulfonamides. She died on the sixth postoperative day of peritonitis. No veratrum viride was administered after the second postoperative day. The infant survived.

Impression: Benign hypertension, cesarean section for cephalopelvic disporportion, and postoperative peritonitis.

CASE 2.—An 18 year old white primigravida was admitted to the hospital at 32 weeks gestation. Study revealed a plasma protein of 4.4 with a reversal of the A/G ratio, and persistent albuminuria with as high as 22.5 Gm. of albumin in twenty-four hours. Urinalyses showed many casts, a moderate number of red blood cells, and a moderate number of white blood cells. The blood urea remained normal. Kidney function tests showed mild kidney impairment. There was a moderate anemia. There were no symptoms or perceptible edema at any time. A low grade hypertension persisted throughout her hospital stay. Supportive therapy was given with a high protein diet, amino acids by mouth, ferrous sulphate, vitamins, and so forth. Labor was induced by rupture of the membranes and the patient was delivered of an apparently normal premature infant weighing 4 pounds, 12 ounces on the twenty-third hospital day. She was given veratrum viride only during labor when her blood pressure rose to moderate hypertensive levels. The mother and child left the hospital in good condition.

Impression: Chronic nephritis with exacerbation in pregnancy; premature parturition with delivery of an apparently normal premature infant.

CASE 3.—A 23 year old white primigravida was admitted to the hospital at term and in labor. Her blood pressure on admission was 190/130. Shortly

after admission she suddenly lost her vision and in a few moments became unconscious. When seen shortly after the onset of coma, she appeared lifeless, with no respirations, no pulse, and a generalized mottled lividity. Vigorous artificial respiration and stimulants were followed by restoration of heart beat and respirations. The blood pressure after resusitation was 280/130. The patient remained in deep coma with a generalized and complete flaccid paralysis. Labor pains did not return. Urinary incontinence with a normal urinary output followed. Veratrum viride was given in a futile attempt to treat this patient. A cesarean section was performed with delivery of a stillborn infant. The patient's condition remained unchanged and she died twelve hours after admission. No laboratory work or autopsy was obtained.

Impression: Term pregnancy; in labor; unclassified hypertension with intracranial hemorrhage; cesarean section with delivery of a stillborn infant.

CASE 4.—A 22 year old white primigravida was admitted to the hospital at eight months gestation, in an unconscious state, with a blood pressure of 150/90. At the time of the patient's admission the urine contained 30 mg. per cent of albumin. Subsequent specimens were entirely negative. Her blood pressure was lowered to normal levels and kept there with veratrum viride during the first five hospital days. She was still comatose after twenty-four hours. Labor was induced. She delivered a viable infant weighing 6 lb. 2½ oz. on the second hospital day. Spinal puncture on the fifth day proved the diagnosis of intracranial hemorrhage. Subsequent history and neurological consultation revealed that the patient had had neurosurgery performed at 9 months of age for a frontal meningocele. Her postpartum course was characterized by gradual and progressive improvement until her discharge on the forty-fifth hospital day when she had returned to an apparently normal state.

Impression: Pregnancy and parturition at 36 weeks gestation; delivery of an apparently normal infant; hypertension of undetermined origin; subarachnoid hemorrhage, probably originating in an aneurysm of a vessel in the neighborhood of an old frontal meningocele.

SUMMARY AND CONCLUSIONS

1. A series of 34 cases of severe preeclampsia and 14 cases of eclampsia is presented. There was no maternal mortality in this group of patients.

2. Evidence is presented to substantiate the belief that toxemia of pregnancy is an affection of the vascular system and that vasospasm of the small terminal arterioles plays an important role in the pathogenesis of the disease.

3. Emphasis is placed upon the energetic treatment of preeclampsia and the value of veratrum viride, as a vasodilator, in this condition. Only one preeclamptic patient developed eclampsia under the described treatment.

4. Rapid control of convulsions was accomplished by a combined therapeutic regime which included hypertonic glucose by vein, magnesium sulphate intramuscularly and veratrum viride hypodermically. The effectiveness of this regime is thought to be due in large part to the vasodilatation produced through the action of magnesium sulphate and veratrum viride.

5. Cesarean section was not deemed necessary in any of the preeclamptic or eclamptic patients.

6. There were no stillborn infants among the preeclamptic patients and only one among the eclamptics. One hydrocephalic infant and one macerated fetus of a six months therapeutic abortion are excluded.

7. The use of veratrum viride in some of the other hypertensive syndromes of pregnancy is believed to be of value and is under further investigation. A series of 11 such cases is presented. There were two maternal deaths in this group, one resulting from postoperative sepsis and one caused by intracranial hemorrhage.

8. Veratrum viride, in the form of a purified aqueous solution of the active alkaloids, can be given in therapeutic doses without signs of drug intoxication, without producing vascular collapse, and without the need of antidotes.

9. Although this series is small, the 59 cases presented represent the most severe of the hypertensive syndromes occurring in 6,094 consecutive deliveries. The results of the therapeutic regime described have been so gratifying that it was thought a report would be of value.

The author wishes to acknowledge his indebtedness to Drs. W. E. Massey, A. A. Newsom, W. T. Robinson, W. K. Strother, J. McIver, W. W. Winn and other members of the obstetrical staff for unlimited advice and guidance, constructive criticism and encouragement in carrying out this work, and in preparation of this paper.

REFERENCES

1. Beck, A. C.: Obstetrical Practice, ed. 2, Baltimore, Williams and Wilkins, 543-547, 1939.
2. Bryant, R. D., and Fleming, J. G.: Veratrum in the Treatment of Eclampsia, J. A. M. A. 115:1333-1339 (Oct. 19) 1940.
3. Cramer, W. J.: J. Pharmacol. & Exper. Therap. 7:62, 1915.
4. Eastman, N. J.: Vascular Factor in the Toxemias of Late Pregnancy, Am. J. Obst. & Gynec. 34:549-557 (Oct.) 1937.
5. Hare, H. A.: Textbook of Practical Therapeutics, ed. 20, Philadelphia, Lea & Febiger, 1927, p. 555.
6. Hofbauer, J.: Relation of the Pituitary to the Etiology of Eclampsia, correspondence, Am. J. Obst. & Gynec. 41:718-719 (April) 1941.
7. Irving, F. C.: The Vascular Aspect of Eclampia, Am. J. Obst. & Gynec. 31:466-476 (March) 1936.
8. Jarisch, A., and Richter, H.: Die Kreislaufwirkung des Veratrins, Arch f. exper. Path. u. Pharmakol. 193:347-354, 1939.
9. Mussey, R. D., Hunt, A. B., and Sluder, F. S.: Hypertension and Pregnancy, Am. J. Obst. & Gynec. 45:224-235 (Feb.) 1943.
10. Mussey, R. D.: The Relation of Retinal Changes to the Severity of Acute Toxic Hypertension Syndromes of Pregnancy, Am. J. Obst. & Gynec. 31:938-946 (June) 1936.
11. Parks, J., and Pearson, J. W., Jr.: Cerebral Complications Occurring in the Toxemias of Pregnancy, Am. J. Obst. & Gynec. 45:774-785 (May) 1943.
12. Rubin, M. I., and Rapoport, M.: Mode of Action of Magnesium Sulphate in Reducing Hypertension of Acute Glomerulonephritis, Am. J. Sc. 201:734-745 (May) 1941.
13. Siever, J. M., and Mousel, L. H.: Continuous Caudal Anesthesia in 30 Unselected Cases, J. A. M. A. 122:424-426 (June 12) 1943.
14. Solis-Cohen, S., and Githens, T. S.: Pharmacotherapeutics, Materia Medica and Drug Action, New York, D. Appleton-Century Company, 1928, p. 1321.
15. Wagener, H. P.: Arterioles of the Retina in Toxemia of Pregnancy, J. A. M. A. 101:1380-1384 (Oct. 28) 1933.

ABSTRACT OF DISCUSSION

Dr. Asa Newsom, Dallas: I began the practice of medicine at the end of the popularity of tincture veratrum viride as used for eclampsia. I had seen some unfavorable results and was very skeptical about the use of this drug as Dr. Harkins suggested; however, some reports in the literature were reviewed and the staff agreed to permit Dr. Harkins to carry on his work. Over a period of about twenty-one months he had treated 34 cases of severe preeclampsia and 14 cases of true eclampsia. This drug is added in addition to other drugs that we had been accustomed to using, with the exception that heavy sedation was omitted. We felt that it was a definite aid to the patient in improving her condition so that her pregnancy might be terminated under more favorable conditions for both mother and child. As you noticed in Dr. Harkins' report, there was no cesarean section in either group. This drug is not advocated as a cure for toxemias in pregnancy, but for an aid in control of the alarming symptoms which accompany this condition.

Dr. H. C. Eckhardt, Yorktown: At first I had no intention to say anything regarding this excellent paper. The use of veratum viride in the treatment of preeclampsia, eclampsia, and other hypertensive syndromes of pregnancy is by no means new. I should like to refer to Hirst's Obstetrics, published in 1903, and also the 1910 edition, in which the use of veratrum viride in these conditions was advised. A good many of the drugs now used, which to some of us are considered new, are really only old drugs which had been discarded and are now rejuvenated. I feel that all of us would do well to get out our old editions of materia medica and therapeutics and give them more study.

MEDICO-LEGAL CONFERENCE AND SEMINAR

The Department of Legal Medicine of the medical schools of Harvard, Tufts, and Boston University in association with the Massachusetts Medico-Legal Society will present a six-day program of lectures, conferences and demonstrations having to do with the investigation of deaths in the interest of public safety. October 3 to 9. Attendance during five of the six days of the course will be limited to fifteen persons who have registered in advance. On one day (October 3) the program will be open to any physician, lawyer, police official, or senior medical student who may care to attend.

The Conference, which will occupy the full day of October 3, may be attended without charge. Preliminary registration is required for the seminar, one of the graduate courses in Harvard University Medical School. The fee is $25.00.

Further information may be obtained from secretary of the Massachusetts Medico-Legal Society, 25 Shattuck Street, Boston.

EFFECT OF SULFONAMIDES ON TEETH

Do sulfonamide compounds affect the teeth?

In answer to this query, *The Journal of the American Medical Association* for June 16 reports that there is no way in which sulfanilamide or any of its compounds could affect the structure of the teeth or modify the process of dental decay. Regarding the use of vitamins to prevent or treat dental decay, a number of investigations have proved that vitamins are ineffective. The enamel of the tooth, where the decay first begins, does not have cells or blood vessels, and therefore does not have the power to rebuild or repair. The only effective treatment for the decayed tooth is the removal of the decay and a filling replacement of the lost structure.

HEART INJURIES WITH REPORT OF THREE CASES

CHARLES D. REECE, M. D.
HOUSTON, TEXAS

Usually, when we think of injuries to the heart we are thinking about penetrating wounds due to knife stabs or bullets that penetrate the chest and heart. A review of the literature may lead us to believe that the non-penetrating type of trauma to the heart occurs but rarely.

The purpose of this paper is to arouse interest in this subject, and stress the importance of considering possible injury to the heart in all cases of trauma to the heart either by penetrating wounds or result of trauma without visible external evidence of injury to the chest wall or by direct or indirect trauma to the heart or its great vessels. If we are looking for cardiac injuries, we are more likely to find those that do occur, and they may not be as rare as formerly thought. Most of the contusions as the result of the non-penetrating type of trauma fortunately produce no functional disturbances and are not recognized; however, functional disturbances are probably not recognized in most cases. We think of the heart as an organ that almost always escapes the usual injuries to which the rest of the body is subjected.

The thoracic cage is usually considered to be practically a perfect armor for the heart. The brain in its bony protection, the spleen, the liver, the kidneys and other organs of the body are not immune to trauma. The heart lies behind the sternum, and buttressed against the bodies of the thoracic vertebrae posteriorly is vulnerable to compression forces applied to the chest. Brahdy and Kahn have emphasized that no conclusion of a traumatic heart case should be given without a consideration of the following items:

1. The physical and psychic condition of the patient prior to his injury.
2. The type, site and severity of the injury.
3. The immediate effects of injury both objective and subjective.
4. "Bridging symptoms."
5. The time interval between the injury and appearance of the disease.
6. Diagnosis of the disease, its mode of onset, the site of the injury and its course.

With penetrating wounds to the heart, the heart tamponade or compression of the heart by blood in the pericardium should be suspected in all lacerations of the chest.

Read before the Texas State Heart Association, April 20, 1944.

SIGNS AND SYMPTOMS OF HEART TAMPONADE

1. Patient is usually free from symptoms for several minutes after the wound has been received. (Able to walk several blocks or fight on.)
2. External bleeding stops as tamponade forms.
3. Marked circulatory collapse which is out of proportion to the amount of blood lost.
4. Heart sounds distant, muffled and weak. Slushing may be heard.
5. Pulse weak or absent.
6. Arterial blood pressure low.
7. Venous pressure raised. Prominent strutted veins of the neck. Venous pressure 200 to 300 mm. of H_2O.
8. Fluoroscopic examination shows diminution or absence of cardiac pulsation (quiet heart).
9. Marked dyspnea, pallor, cyanosis, unconsciousness.

It is not the purpose of this paper to cover the surgical aspects of penetrating wounds to the heart. But because heart tamponade is the most common cause of death in cases of injury to the heart that reach the hospital or physician, the diagnosis should be made by the clinician and prompt conservative treatment by aspiration of the blood from the pericardial sac may be lifesaving.

Briefly, the U. S. Army directions for treatment of penetrating heart wounds with tamponade (as prepared by Graham, Biggers and others) are as follows:

1. Aspirate blood from the pericardium.
2. Repeat if there is recurrence.
3. If it again recurs, operate.

Direct Trauma to Heart.—If force is applied to the lateral aspect of the chest, there is rarely any damage to the heart. Ribs on both sides of the chest may be fractured or all of the ribs may be fractured and no heart injury occur. Force posteriorly rarely if ever causes damage to the heart.

Anterior pressure or force applied anteriorly to the chest *does* cause heart trauma. The force received by the patient has to be determined by the size or weight of the object, and the momentum of the object has to be considered. Thus, a box car moving slowly or a golf ball moving fast can cause force sufficient to do things to the heart. Anterior and posterior application of force or compression of the heart, as when a person is run over by an auto, may cause injury to any chamber of the heart. Bright and Beck's statistics indicate that all chambers of the heart may be injured by direct trauma. Bilderbeck has advanced the suggestion that a probable cause of heart rupture is the sudden compression of a right auricle which becomes engorged due to the patient holding his breath in deep inspiration just before a blow is received. White and Glendy feel that an important factor in rupture of the heart wall is the distention of the heart chamber at the end of diastole or early systole. Lewis has stated that with deep inspiration and the glottis closed the heart dilates very markedly and remains in this state as long as the inspiration is maintained. (Case 2 reported here is an illustration.) Gouley, of the Philadelphia City Morgue, in his series of cases found the right auricle injured in 32 cases; the left auricle in 16 cases; the right ventricle in 4 cases; and the left ventricle injured in only 1 case. The left ventricle escapes injury as it is placed deeper in the chest, better protected and is a stronger, robust muscle than the auricle. The right auricle is more susceptible to trauma by its anatomical relation to the anterior chest wall.

Age levels.—Children and young adults are more likely to have heart damage without external evidence on the chest. The pathologist believes the injury to the chest wall is there if care is taken to look at the inner aspects of the intercostal tissues, where hemorrhage, extravasation of blood or hematoma may be found in one or two interspaces or more general. Persons in mid-life and older do not have injuries as the result of blows to the chest without injury to the chest wall. Coronary thrombosis is never found in children and young adults due to trauma to the chest. They just do not occur. The right coronary, lying 3 or 4 cm. beneath the sternum with a portion in the auriculo-ventricular groove, is well protected and the fat may be traumatized but not the coronary artery. Coronary thrombosis due to direct trauma is negligible. In older people we do see coronary thrombosis, as it is a disease of mid-life and of older people with athero-sclerosis. A punch on the chest of a man fighting will not cause coronary thrombosis but a missed punch and anger may. A boxer may get a blow to the neck with hemorrhage into the carotid sinus and die, but is not likely to die from coronary thrombosis as the result of a chest blow. A patient may fall or slip down as the result of coronary thrombosis, but the fall did not cause the thrombosis. He had syncope and falls, trips or slips as a result of the heart disease.

The general pattern of injuries anteriorly as mentioned by Gouley: If injuries to the lower one-half of the sternum with adjacent 6th, 7th, 8th and 9th ribs on the right side, with or without fracture of such ribs, we may expect to find hematoma of the right auricle, injury to the inferior vena cava, diaphragm

and liver and death usually immediately. If the upper one-half of the sternum is injured, with or without adjacent rib structures, there should be damage to the auricles.

Suspicion of heart injury with fluoroscopic examination and electrocardiographic studies and careful follow-up and observation should lead to the diagnosis of more cardiac injuries. The development of the tic-tac rhythm as mentioned by Beck should be suggestive in suspected cases.

CASE REPORTS

CASE I. E. W. R., a white man, age 26, an oil field worker by occupation, had a sharp, severe pain occur suddenly beneath the sternum, which then passed down to the abdomen. This was about 4:30 p. m., November 13. He became nauseated and vomited. He thought he was having an attack of appendicitis and he was taken to a physician.

He stated that he had pushed a crowbar into the end of a pipe in order to lift it and, it being too high to lift with his hands, stooped over, crossed the bar across the inside of his bent elbows and lifted with all his weight and strength. The attending physician administered morphine and the patient was admitted to the hospital for observation.

The next morning the patient did not seem to be in severe pain except soreness in the abdomen and an occasional pain in the chest. The blood pressure was 140/110. The record of previous blood pressure for employment was 122/78. The temperature and pulse were normal. Respiration was normal; a blood count was normal, and urinalysis was negative. Fluoroscopic examination of the heart showed some cardiac enlargement. A roentgenogram made two days later showed a large heart shadow with the water bottle appearance. The blood count at that time showed 12,750 leukocytes with 82 per cent polys. An electrocardiogram was made which was reported as normal. On November 16 the patient complained of increasing chest pain and became more dyspneic. The pulse became more rapid to 128, and the temperature had reached 100.8. The respiration rate was 36. A Kline test was reported negative, and an icterus index was 15. The patient continued to have pain in the chest with radiation to the right shoulder. On November 18, about 6:00 p. m., the patient became very dyspneic and died—to the surprise of the attending nurse. Autopsy was performed with the following positive findings:

The pericardial sac when opened was found to contain a large amount of clotted and liquid blood. The heart was of apparently normal size. The aorta showed a long tear in the intima, the tear having very ragged edges and about one and one-half inches in length near the junction of the aorta and ventricle. Further examination revealed a small tear in the serous coat close to one end of the long tear in the intima. The muscular layer of the aorta showed evidence of extravasation of blood around the vessel between the intima and the serous coat. The heart cavities were apparently normal. The valves were normal.

Dr. Violet Keiller gives a detailed autopsy protocol of the heart and aorta as follows:

"Heart, pericardium and contiguous portions of esophagus, trachea and bronchi and the upper part of descending aorta brought for examination. The parietal pericardium is enormously dilated, thin and is described by Dr. B. E. S. as having been filled with a very great quantity of fluid and recently clotted blood. The trachea and bronchi and esophagus are normal. There are a few soft enlarged glands at the bifurcation but these show no evidence of old lesions. Edema, slight hyperplasia and blood staining indicate response to the outpouring of blood below. The parietal pericardium shows areas of fibrin on its surface, easily separated; wide areas without fibrin are the effect of the rapid distention of the sac by the terminal hemorrhage. There is no evidence of an old lesion of the parietal pericardium. Heart has been removed with the origins of all great vessels and 10 cm. of the aorta. The entire visceral pericardium is covered with a soft furry fibrinous deposit 1 mm. thick or less which separates easily except at one area where it is reflected from the first part of the aorta; the deposit is firmer and it is adherent here to the portion covering the superior vena cava. The heart is of normal size; the left ventricle is contracted. The musculature appears normal. The heart valves are normal.

"Aorta: The loose tissue surrounding the first part of the aorta, that is the tissue of the fibrous pericardium, was found infiltrated with blood. Very slight anteriorly, the infiltration increases as one passes backward. This infiltration has stripped up the areolar tissue beyond the reflection of the fibrous pericardium. On examining the interior of the aorta very slight atheroma is present at each coronary orifice. The coronaries are otherwise normal. Very small yellowish elevations each 1 mm. or less are present over the remaining ascending aorta

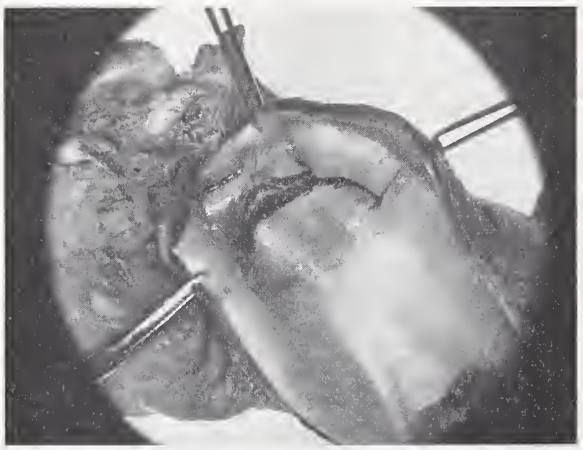


FIG. 1 (Case 1). Photograph showing tear in the aorta.

and the portion of descending aorta submitted for examination shows one slightly larger area just above the level of the first intercostals; no evidence of atheromas found below this level. It is to be noted that with the exception of the lesions at the coronary orifices these atheromatous patches are so insignificant that they would not have attracted attention in the usual observation of an aorta at autopsy. Starting at the left edge of the right posterior aortic sinus and just missing the origin of the aortic valve cusp here a tear extends throughout the entire thickness of the wall of the aorta. It passes upward and towards the right diagonally across the vessel for a distance of 5.5 cm.; its distal end is bifurcated for about 0.5 cm., the edges are angulated and curved and are obviously of some days' duration. From a careful study of the edges of the tear, and a comparison of the gross and microscopic findings, it is believed that the initial rupture extended through about half the thickness of the media, which here in the aorta is largely composed of elastic membrane. The outer layers of media evidently withstood the pressure from within for some time aided by the strong fibrous pericardium and the proximity of this structure on the superior cava. The final rupture passed through the outer layers of media, the thin

adventitia and the fibrous pericardial tissue. The seal of final rupture of this protective fibrotic layer can be identified behind the center of the aortic tear and has been the source of the terminal hemorrhage into the pericardial cavity. Microscopic sections were made through the atheromatous patch on the descending aorta and showed very early characteristic atheromatous lesions here. There is no evidence of syphilitic aortitis.

This case serves to illustrate rupture of the aorta which had its beginning in an atheromatous plaque. We can picture this man lifting this weight of pipe which is the limit of his capacity, every muscle strained, his neck veins engorged and probably holding his breath with the crouched position, with the increased abdominal pressure. If there is any disease of aorta or heart, there may be rupture, or in a normal heart there may be injury.

Case 2. E. H., a Negro woman, age 27, weighing 198 pounds, was stabbed in the chest on the night of February 26, 1943. She was taken to a hospital where her wounds were sutured. The record at the hospital states that the surgeon was unable to probe into the pleural cavity and that there was no subcutaneous emphysema. The wound was treated with sulfa crystals and she was given 1,000 cc. of 10 per cent glucose infusion and sent home. She went home in a taxi about 2 a. m. and collapsed when she

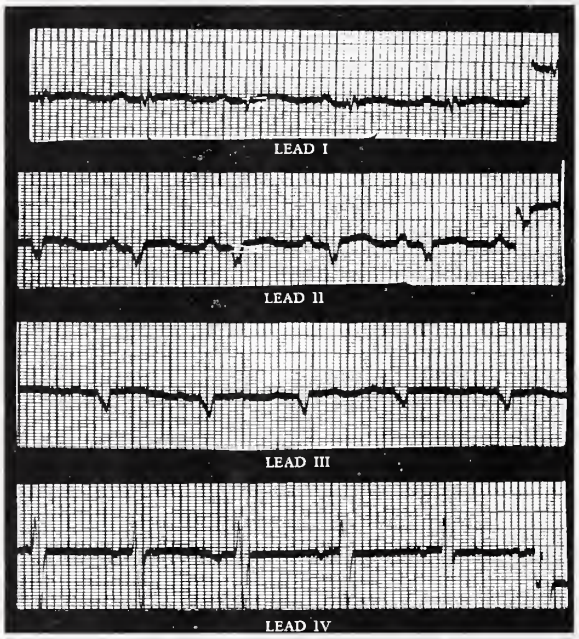


Fig. 2 (Case 2). Electrocardiogram in a case of aneurysm of the left ventricle.

was getting out of the taxi but was not unconscious. She was put to bed lying flat. Before morning, due to shortness of breath, it was necessary to prop her up in bed. In the first twelve hours following her injury she began to experience pain in the lower left anterior chest. The shortness of breath and pain continued but evidently did not get worse because she did not return to the hospital—not even to have her sutures removed. She took the stitches out herself. Sometime during the next two weeks she improved enough to return to her job as maid but was compelled to give up her work in two or three days because of pain and shortness of breath.

During March and April she described herself as miserable with pain and shortness of breath and she spent the nights sitting in a straight chair with her head on the dining room table. It was impossible to lie down due to difficulty in breathing and pain. Gradually swelling of the feet and ankles appeared and increased until when she entered the hospital on May 7, 1943, she stated that her lower extremities were swollen to three or four times their normal size.

She remained in the hospital from May 7 to June 18, was discharged and re-entered June 28 and remained until August 8. During this time her temperature at times was up to 100 F. but for the most part she was afebrile. The edema subsided and the shortness of breath decreased but did not disappear entirely. At the first admission it is recorded that there were no murmurs and that loud wheezes were heard over both lung fields. The blood pressure was 150/110. She had a roentgenogram of the heart for the first time May 18, 1943. This was reported as a normal chest, with only slight exaggeration of bronchial trunks in the lower portion of the lungs. The heart shadow was considerably enlarged to the left with mitral configuration. There was some increased density in the left C-P angle. Serial electrocardiograms were made on May 7, May 12, May 18, May 31, June 7, June 25. These were reported as indicating coronary occlusion of the posterior type, going through the healing stage. A review of these records shows that the main findings were notched P waves with prominence of P waves in Leads 2 and 3. The S-T interval was elevated in all three limb leads and also in the chest lead. T waves were flat in Lead 1 and diphasic in Lead 2, but later became inverted in Leads 1 and 2 and diphasic in 3. The patient was discharged on her first admission with a diagnosis of arteriosclerotic heart disease with coronary occlusion and anxiety neurosis. The diagnosis on discharge the second time was cardiac disease, cause unknown. Many times her hospital record states that her symptoms were due to hysteria. On May 17 this note is recorded, "The resident staff believes that a large amount of her condition is psychic."

Laboratory Findings: The Wassermann test was negative on many occasions. The sedimentation rate was never below 25 and ranged from 25 to 32 cm/60 min. The leukocyte count was usually about 5,000 to 6,000 and on one occasion was 10,200 (May 7).

She continued to have dyspnea and on September 9, 1943, she was admitted to a second hospital after she had seen a private physician who thought her condition was of a serious nature. During this hospital admission she was complaining of the same symptoms and had lost some 75 pounds in weight since the onset of illness.

Clinical examination at this time revealed an enlarged heart with a heaving apex impulse in the mid-axillary line with heart sounds distant in this area. There was an accentuated pulmonic second sound. There was a faint systolic murmur at the apex. The blood pressure was 130/100. The vessels of the neck were not distended. The liver was enlarged to below the costal margin.

X-ray diagnosis, September 9, 1943, was pleurisy with effusion, left base; adhesive pericarditis, with probable small pericardial effusion.

E. C. G. Findings. An electrocardiogram made September 10 showed a rate of 110, sinus tachycardia, small amplitude in all leads, PR .16, QRS .07, P waves upright, prominent with slight notching in P1 and P2. Small QRS complexes in all three leads with slurring especially in Lead 2. T waves slightly

flattened with slight elevation of ST2. QRS inverted in Leads 2 and 3 with a small "W" shaped QRS in Lead 1. With these findings with small amplitude one must consider: (1) pericardial disease with adhesions; (2) possible cardiac aneurysm.

Electrocardiograms made with the patient on her right side showed no appreciable changes except the QRS at this time in Lead 2 and Lead 3 was "W" shaped. An electrocardiogram made November 3, 1943, showed no appreciable changes.

Attempts made to aspirate the pericardial sac were unsuccessful but in the procedure dense pericardial adhesions were felt. Surgery was considered for release of pericardial adhesions, but the patient had a rectal stricture which was complicating the further procedure and a colostomy was done October 22, 1943, to alleviate the rectal symptoms.

She seemed to improve after the operation and with digitalis her pulse remained in the 70's and 80's and she was comfortable until about twenty-four hours before her death. She had complained of severe chest pain, smothering, and had some nausea and vomited during the early morning of November 25. She was found sitting on the commode and with very shallow respiration and died in a few minutes. Autopsy was performed with the cardiac findings as follows:

"*Pericardial Cavity.* Pericardial cavity is obliterated due to adhesions between the parietal and visceral layer. These adhesions are fairly soft and can be separated by blunt dissection except for the lower later portion of the pericardial cavity where both layers are firmly adherent. A few groups of petechial hemorrhages are seen at the inner aspect of the parietal pericardium. About 30 cc. of clear amber fluid are present in the pericardial cavity, mainly in pockets between the adhesions. The adhesions have a soaked, edematous appearance.

"*Heart.* Weighs 1,300 grams. The heart is greatly enlarged, especially to the left, due to a bulging structure arising from the lower portion of the left ventricle, measuring 13 cm. in diameter. Owing to the presence of this mass the heart is greatly displaced to the right and it also appears somewhat rotated to the left around its longitudinal axis. The longitudinal axis of the heart measures approximately 20 cm.; the greatest transverse diameter is 15 cm. and is located 10 cm. above the distal end of the above-mentioned bulging structure. The epicardium is shaggy, mottled dark gray and reddish gray with numerous loose adhesions. In the area of the bulging structure the parietal pericardium is firmly adherent to the visceral layer and cannot be dissected free. There are numerous small groups of petechial hemorrhages located within the loose adhesions, especially over the anterior aspect of the left ventricle. On opening the left ventricle it is found to be filled with partly clotted blood. The above-mentioned bulging mass is found to be directly connected with the left ventricle, being obviously an aneurysm arising from the region of the apex and anterior wall. The ring at the entrance to the aneurysm measures 20 cm. in circumference. The non-involved portion of the left ventricle and septal endocardium is smooth but shows milky discoloration in the lower portion. The border line between normal and altered endocardium is irregular and extends in transverse direction across the ventricle, approximately 3 cm. below the mitral ring. The endocardium in the aneurysm is light yellow and opaque and is covered with a thick layer of moderately soft, very friable, mottled light gray and dark red material, which is more or less firmly adherent. This layer averages 3 cm. in thickness. It is firmer in the peripheral portions and softer and loose towards the center. The myocardium of the left ventricle is dark grayish red, moderately firm and homogenous except for the part underlying the area of milky discoloration of the endocardium. Here the heart muscle is light reddish gray to yellowish gray and moderately firm. These changes are especially marked around the lower half of the anterior descending branch of the left coronary artery where the tissue cuts with a gritty consistency and is glistening light gray on cut surface suggestive of scar tissue. This area measures approximately 4 by 3 by 3 cm. The adjacent portion of the interventricular septum is only slightly altered, being of a reddish gray and having a fairly normal consistency. The myocardium in the region of the aneurysm is thinned, firm, and light reddish gray. The columnae carneae are prominent and thickened as are the papillary muscles. The papillary muscle for the aortic flap of the mitral measures 4 cm. in length and averages 2 cm. in thickness. The average thickness of the left ventricular wall not involved in the aneurysm is 2 cm. and in the area of the aneurysm it is 0.3 cm. The right ventricle is empty except for a small amount of soft postmortem clot. The endocardium is smooth and glistening. The myocardium is dark grayish red, moderately firm and homogenous. Average thickness of the right ventricular wall is 0.8 cm. Both auricles are distended with partly clotted blood and show smooth glistening, light gray endocardium and thin, dark grayish red to brownish red, homogenous myocardium. The tricuspid valve measures 15 cm. in circumference. Chordae tendineae are slender and discrete. The flaps are thin, translucent, show smooth surfaces and only very slight beading in a few areas around the insertion of the chordae tendineae. The pulmonary artery is 8 cm. in diameter. The cusps are delicate and of equal size and shape and show normal commissures. The mitral valve is 10 cm. in circumference. The chordae tendineae are slender and discrete. The flaps are of normal shape, delicate, with smooth, light gray surfaces. The aortic flap shows three subendocardial, dark yellow plaques at its ventricular aspect, the largest of these plaques measuring 1 cm. in diameter. The plaques are somewhat firm and very slightly elevated above the level of the surrounding surface. The aortic valve is 6.5 cm. in circumference. The cusps are thin, of equal size, translucent, with smooth, light yellowish gray surfaces. The commissures show neither widening nor inter-adherence. The ostia of both coronary arteries are patent, averaging 0.3 cm. in diameter. The left main branch is patent with thin, flexible walls and light gray, smooth, glistening intima. The anterior descending branch has a similar appearance up to a point, approximately 3 cm. above the entrance to the aneurysm, where there is a rather abrupt change consisting in marked narrowing and obliteration of the lumen by dark yellow, moderately firm material. A few millimeters beyond this area, the artery is completely obliterated and has disappeared in the above-described area of scarring in the left ventricular myocardium. The left circumflex branch is patent, has thin collapsible walls with light gray, smooth intima. The right coronary artery and its main branches also are patent and have thin, collapsible walls and light gray, glistening intima."

"The aorta is essentially negative.

"*Microscopic. Heart:* A section from the wall of the aneurysm shows the myocardium completely transformed into partly hyalinized fibrous tissue. Moderate round cell infiltration is present. The inner surface is covered by a thick layer of antemortem clot which shows considerable organization at the base. In the areas not involved in the aneurysm the myocardium shows moderate hypertrophy and fragmentation of fibers. The epicardium is edematous and considerably thickened due to formation of granulation tissue, showing numerous newly formed papillary and a moderate amount of lymphocytic infiltration. Hemorrhage is present in several

areas, being partly recent and partly of long standing. In several places there are deposits of a coarsely granular, light brown refractile pigment, obviously hemosiderin; a considerable amount of this pigment is found within large mononuclear cells. Numerous sections were taken from the anterior descending branch of the left coronary artery, at the level of the occlusion as well as above and below the latter. Immediately above the occluded area the artery is of normal appearance. At the level of the occlusion the lumen is obliterated by an old organized thrombus showing a large amount of granulation tissue and newly formed capillaries as well as lymphocytic infiltration. In one area near the periphery there is evidence of recanalization in the form of a small vessel with distinct endothelial lining. The epicardium immediately adjacent to the artery shows considerable lympocytic infiltration. Sections from below the level of the occlusion show the thrombus canalized by numerous endothelium lined vessels and lower down the lumen is free and the artery appears normal except for lymphocytic infiltration of the adjacent epicardium. This infiltration has a distinctly focal character in some of the sections. Sections from the left circumflex branch and from the right coronary artery show normal architecture."

It was the opinion of the pathologist that the patient had had a traumatic injury to the anterior descending branch of the left coronary artery. The occlusion of the artery may have been due to laceration or merely to contraction to surrounding scar tissue. The formation of the aneurysm of the left ventricle was considered to be secondary to the trauma of the coronary vessel. The surrounding epicardium in the area shows marked chronic inflammatory reaction and evidence of old hemorrhage which no doubt represents a previous perforating injury.

I wish to thank Drs. Violet Keiller and Lucille Robey for their interest in these cases.

No mention has been made in this paper of physical agents injuring the heart but the following case is included because, fortunately, it is a very rare one.

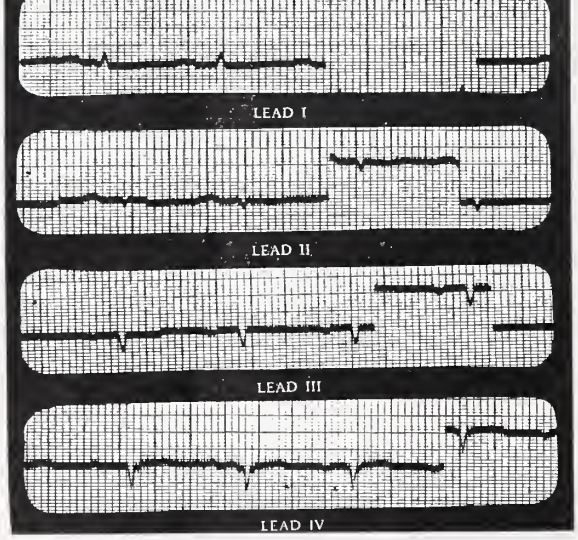


FIG. 3 (Case 3). Electrocardiogram in a case of x-ray myocarditis.

CASE 3. J. D., a white woman, age 44, was admitted to the hospital February 5, 1943, with shortness of breath. The patient stated that she had had a tumor in the upper medial quadrant of the left breast in 1939 and was treated with x-ray. On admission to the hospital the blood pressure was 114/98. The patient was in congestive heart failure and had a gallop rhythm.

X-ray Diagnosis: Cardiac enlargement to the left and right with a straight left border. Cardiac enlargement second degree pericardial effusion. Negative for metastases. Electrocardiograms showed first degree A. V. block, small amplitude. Isoelectric T waves in all three leads. Marked myocardial weakness.

As there was marked atrophy and scarring of the left breast region and over the pericardium, x-radiation was considered as the cause of the congestive failure in this woman, as there were no other etiological factors that could be elicited. Apparently she developed no symptoms of heart failure until about 1941, or two years after x-ray therapy. It was thought that the x-rays had produced atrophy of the muscle fibers of the heart. Slight prolongation of P. R. interval has been found in the experimental animals where lesions were produced by deep x-rays and, of course, small amplitude due to atrophy of the myocardium.

This patient's case was slowly downward and she died November 9, 1943.

Pathological Diagnosis: X-ray myocarditis. X-ray atrophy of the heart and chest wall.

This is apparently the only human case on record where electrocardiograms were recorded in x-ray myocarditis.

REFERENCES

1. Beck, C. S.: Contusions of the Heart, J. A. M. A. 104: 109-114 (Jan. 12) 1935.
2. Beck, C. S.: Further Observations on Stab Wounds of the Heart, Ann. Surg. 115:698-704 (April) 1942.
3. Bigger, I. A.: The Diagnosis and Treatment of Heart Wounds, South. M. J. 33:6-11 (Jan.) 1940.
4. Bishop, L. F.: Trauma and Its Relationship to Heart Disease, New York State J. Med. 40:1099-1103 (July 15) 1940.
5. Blalock, A., and Ravitch, M. M.: A Consideration of the Non-operative Treatment of Cardiac Tamponade Resulting from Wounds of the Heart, Surgery, 14:157-162 (Aug.) 1943.
6. Elkin, D. C.: The Diagnosis and Treatment of Cardiac Trauma, Ann. Surg. 114:169-185 (Aug.) 1941.
7. Kissane, Fidler, and Koons: Traumatic Lesions of the Heart, Reprinted from Publication No. 13 of American Association for the Advancement of Science, pp. 170-175.
8. Mayer, J. M.: The Clinical Management of Injuries to the Heart and Pericardium, Surg., Gynec. & Obst. 62:852-864 (May) 1936.
9. Moritz, A. F., and Atkins, J. P.: Cardiac Contusion, Arch. Path. 25:445-462 (April) 1938.
10. Parsonnet, A. E., and Bernstein, A.: Heart Strain: A Critical Review; The Development of a Physiologic Concept, Ann. Int. Med. 16:1123-1136 (June) 1942.
11. Sigler, L. H.: Trauma of the Heart Due to Nonpenetrating Chest Injuries, J. A. M. A. 119:855-861 (July 11) 1942.
12. Singleton, A. O.: Wounds of the Heart and Discussion of Causes of Death, Am. J. Surg. 20:515-532 (June) 1933.
13. Smith, L. B., and McKeown, H. J.: Contusion of the Heart, Am. Heart J. 17:561-568 (May) 1939.
14. Gouley: Clinic, City Morgue, Philadelphia.

NEW YORK GOVERNOR UPHOLDS MEDICAL EDUCATION

Stating that word has just been received that Governor Dewey has vetoed the two bills passed by the New York legislature permitting the granting of a medical license to graduates of any medical school in the United States, *The Journal of the American Medical Association* for April 28 says that "New York State and its governor merit congratulations. Again the standards of medical education and medical care have been saved by the courage and wisdom of a governor, after a legislature failed to recognize its obligation to the people."

AN INTERESTING DIAGNOSTIC PROBLEM

SAM E. THOMPSON, M. D., F. A. C. P.
AND
WILLIAM W. COULTER, JR., M. D.
KERRVILLE, TEXAS

This case is reported because in retrospect certain aspects of it have been noted which might have afforded a clue to the diagnosis. The similarity of certain of the findings to descriptions of other diseases in the literature is also notable. The x-ray findings are particularly striking.

The patient, a white male, age 41, about 63 inches tall and weighing 220 pounds, ate a large meal on the night of April 21, 1942, and shortly thereafter noted a cramping pain in the epigastrium. In the course of about an hour the pain moved to the left lower quadrant of the abdomen. The following morning the pain had localized in the right lower quadrant, and at this time a physician was called. He diagnosed the illness as appendicitis, and advised an immediate appendectomy. This was done, and the diagnosis confirmed.

After an apparently uneventful recovery the patient returned to work, but did not regain his former good health, saying that he felt "below par" all the time. On May 27, 1942, he went to bed at home because of malaise and fever, and stayed in bed at home for four days. By this time his fever had risen to 103 F. and he called a physician who, after examining him, advised that he enter the hospital. He went to the hospital, was examined there, and on the second day of his stay roentgen studies of his lungs were made. Sputum cultures made at this time showed pneumococci, but no tubercle bacilli. The leukocyte count was normal. He was discharged from the hospital on the sixth day with a diagnosis of virus pneumonitis. This diagnosis was apparently made principally on the strength of the chest x-ray finding. (Fig. 1*a*). Rales were noted over the upper and middle lobes of the right lung before admission.

Although his acute symptoms had subsided, he continued to be easily fatigued and to have low grade fever, especially in the afternoons, as well as to lose weight and suffer mild malaise, and therefore on June 18, 1942, went to Scott and White Clinic for a "complete check-up." He went through the clinic and roentgen examination was made again on June 20. He was advised to enter the hospital and have a transfusion, which he did, having one transfusion on June 22, of 500 cc. of whole blood, and a similar one on June 25. He was discharged on July 7, with a diagnosis of x-ray evidence of abnormality in the upper portion of the right lung, and advised to consult a chest specialist.

A summary of the laboratory findings at the Clinic and in the hospital follows:

Electrocardiogram: Rate 75, sinus rhythm; left ventricular preponderance; notched P wave in leads 2 and 3; inverted T wave in lead 3; depressed S-T interval in lead 2.

Urinalysis was normal.

Blood counts on various dates were as follows:

June 10, 1942, hemoglobin 12.5 Gm.; red blood cells, 4,060,000; leukocytes, 5,000; neutrophilic polymorphonuclears, 88 per cent. The sedimentation rate was 90 mm. per hour.

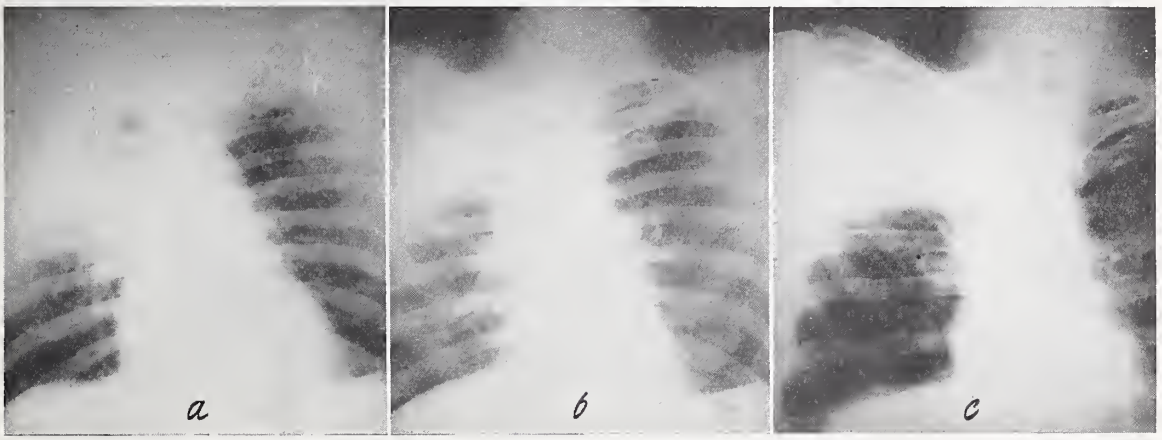


FIG. 1. Roentgenograms in case reported.
a. Roentgen findings on which a diagnosis of virus pneumonia was made.
b. Roentgenogram made July 16, 1942, showing increased density from the level of the fifth right interspace upward. There is slightly less density above the clavicle. The trachea is shifted slightly toward the affected side.
c. Roentgenogram made July 22, 1942, with a somewhat longer exposure.

June 29, 1942, the hemoglobin was 15 Gm.; red blood cells 4,960,000; leukocytes, 8,300; neutrophilic polymorphonuclears 69 per cent; lymphocytes 29 per cent; eosinophiles, 2 per cent. The sedimentation rate was 51 mm. per hour.

July 1, 1942, the hemoglobin was 14.5 Gm.; red blood cells 4,740,000;; leukocytes, 9,200; neutrophilic polymorphonuclears, 67 per cent; lymphocytes 30 per cent; eosinophiles 3 per cent.

July 6, 1942, the hemoglobin was 14 Gm.; red blood cells, 4,800,000; leukocytes, 13,500; neutrophilic polymorphonuclears, 63 per cent; lymphocytes, 35 per cent; eosinophiles, 2 per cent. The sedimentation rate was 60 mm. per hour.

Bacteriologic studies gave a negative Weil Felix test in all dilutions. The Malta fever test was negative in all dilutions, and no tubercle bacilli were found in the sputum. X-ray studies gave the following findings:

June 19, 1942, a round area of increased density was noted occupying the majority of the right upper lobe, suggesting superior pulmonary sulcus tumor or atypical tuberculosis. Lung abscess could not be definitely ruled out.

June 20, 1942, infiltration of the right upper lobe as previously reported; with no change from the

Read before the Kerr-Kendall-Gillespie-Bandera Counties Medical Society, Kerrville, Texas, March 27, 1944.

roentgenogram made June 19. Pulmonary sulcus tumor or lung abscess were suggested, but tuberculosis could not be ruled out.

July 1, 1942, it was stated that there might be some very slight increase in the density of the process in the right upper lobe. Other than this, there had been no change. It was suggested that a neoplastic process be considered; that the condition was atypical for tuberculosis and no abscess cavity was demonstrable.

July 6, 1942, the roentenologist reported no change in the area of density in the right upper lobe. Neoplasm or atypical lung abscess were again suggested.

Roentgen study of the genito-urinary tract revealed an opaque calculus, about 3 mm. in size, in one of the upper calices of the left kidney.

Dental examination made June 19, 1942, revealed sufficient local evidence to warrant extraction of some teeth because of pyorrhea. At this time the patient came to Kerrville and was examined by us. The history was the same as given above. The patient denied having had chest pains. On physical examination, a very few extremely fine rales were heard on deep inspiration at the top of the right lung, and decreased resonance was noted from the third rib upward anteriorly. Due to the thickness of the musculature we were not able to satisfactorily percuss the upper portion of the lung field posteriorly. Radiographic study revealed increased density from the level of the fifth right interspace upward. This density amounted to complete opacity between the clavicle and the fifth interspace, and extended outward to the periphery of the lung. Above the clavicle there was slightly less density, but no lung markings were apparent. The trachea was slightly shifted toward the side of the lesion. This radiograph was made on July 16, 1942. (Fig. 1*b*). Daily examination of the sputum was made for two weeks with no tubercle bacilli or fungi being found, and the patient was observed. The temperature was normal, as were pulse and respiration, and the patient stated that he felt well. The breath was not foul. The tuberculin test was strongly positive. On July 22, 1942, another radiograph was made, a somewhat longer exposure being used (Fig. 1*c*). Findings were essentially the same. On July 29, 1942, another roentgenogram was made, using a lighter exposure. No additional information was obtained. (Fig. 2*a*). The patient was observed until August 14, 1942, at which time another roentgenogram was made. The lesion was somewhat less opaque, but lung markings were still absent. (Fig. 2*b*). During this time the patient was symptom free and had no fever.

On August 18, 1942, another radiograph was made, increased penetration being obtained by longer exposure and increased voltage, and at this time there was seen an area of increased density medially, which was still nearly opaque. Lateral to this was an area of less marked density in which lung markings were evident. It was believed that this represented a mass of some sort occluding the bronchus and producing atalectasis. (Fig. 2*c*). Inasmuch as we were unable to definitely determine the nature of this mass we advised the patient to have a bronchoscopy. Bronschoscopy and instillation of lipiodol revealed that the right upper lobe bronchus was occluded but did not reveal the nature of the occlusion. A small amount of granulation tissue could be seen through the bronchoscope. No final diagnosis could be made, and the patient was advised to consult Dr. E. A. Graham of St. Louis. A portion of Dr. Graham's report to us follows:

"Repeated x-ray examination showed the persistence of a right upper lung infiltration which failed to disappear although the patient was relatively symptom free. Examination showed a not acutely or chronically ill man with slight dulness and bronchial breath sounds in the right upper lung field. X-rays taken here showed the same shadow as previously described, which appeared to represent an atalectasis of the right upper lobe. A bronchogram failed to show a filling defect and a bronchoscopy on August 25, 1942, showed no evidence of a tumor. A moderate amount of pus was seen coming from the right upper lobe bronchus. The patient was discharged with a diagnosis of pneumonitis, right upper lobe, etiolgy undetermined."

The patient returned to Kerrville and was given bed rest. Examination of the sputum was continued daily, and another roentgenogram was made on September 22, 1942, but no additional information was obtained. On October 16, 1942, another roentgenogram was made; at this time there seemed to be some involvement of the upper two thirds of the right lung field by patchy exudative lesions in addition to the condition previously described. (Fig. 3*a*). In spite of this the patient felt quite well and was not losing weight or becoming anemic. How-

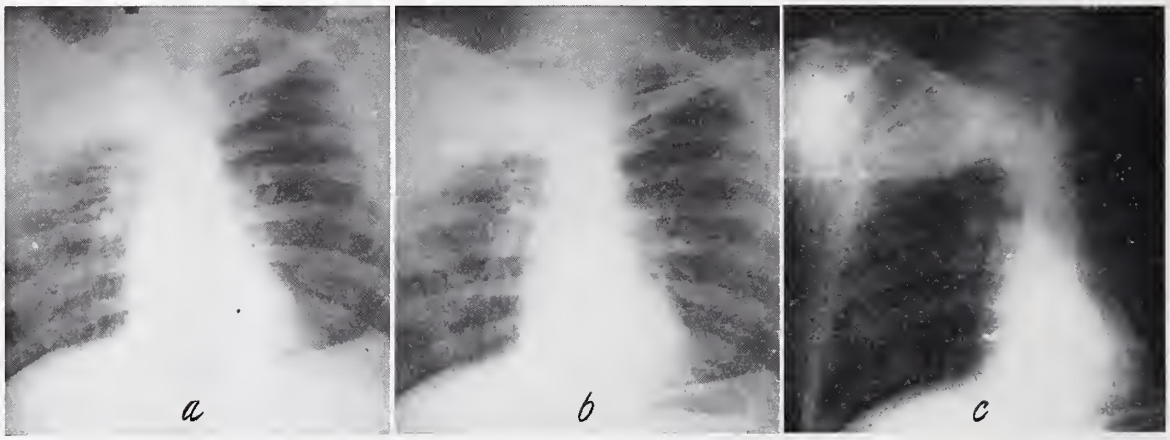


Fig. 2 *a*. Roentgenogram made July 29, 1942, with lighter exposure than in Fig. 1*c*, giving no additional information.
b. Roentgenogram made August 14, 1942. There is slightly less opacity in the affected area, but lung markings are still absent.
c. Roentgenogram made August 18, 1942, using longer exposure and increased voltage, giving increased penetration. This technique visualizes an area of increased density medially. Lateral to this area is an area of less marked density, in which lung markings are evident. This may represent a mass occluding the bronchus and producing atalectasis.

ever, he began to have some afternoon fever, the peak being around 99.6 F., about four in the afternoon.

About the tenth of the following month his fever increased and he began to cough up greatly increased quantities of sputum and to suffer from marked malaise. Sputum examination (which had been continued throughout the illness) revealed numerous tubercle bacilli. Another roentgenogram x-ray was therefore made on the seventeenth (Fig. 3*b*), which showed an area of decreased density between the fifth and sixth ribs on the right side. It was believed that this represented a cavity which had produced the sputum. Further sputum examinations were consistently positive for tubercle bacilli, and a roentgenogram on a later date definitely confirmed the presence of a cavity about three centimeters in diameter. (Fig. 3*c*). Since this time the patient has been treated as a case of tuberculosis with cavitation.

The diagnosis of tuberculosis having been made, the patient was questioned again and recalled having had pains compatible with pleurisy, prior to the onset of the present illness. He also stated that he felt fatigued for several months before the onset of the illness, but had ascribed this to the increased strain put upon him by the beginning of the war effort (he was in the transportation business) and had forgotten and therefore denied it in his previous history.

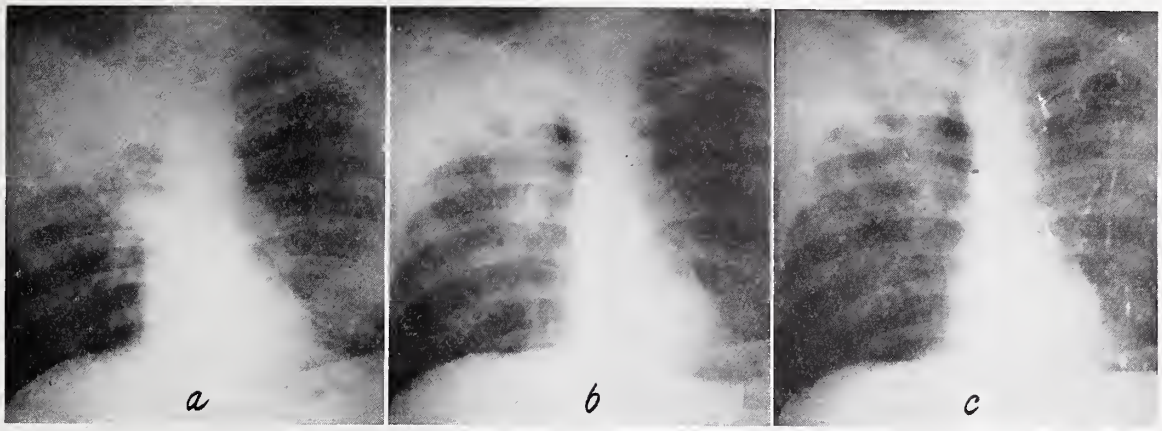


FIG. 3 *a*. Roentgenogram made October 16, 1942, in which there appears to be some involvement of the upper two-thirds of the right lung field by patchy exudative lesions in addition to the condition previously described.
b. Roentgenogram made November 17, 1942, showing increased density between the fifth and sixth ribs on the right side, which is thought to be a cavity.
c. Roentgenogram made later definitely confirming the presence of a cavity about 3 cm. in diameter.

DISCUSSION

It is likely that we will be criticized for having failed to elicit a history of pleurisy and ease of fatigue prior to the acute episode which at first was believed to have represented the beginning of the illness. We feel that such criticism is entirely unjustified. Although we realize that repeated asking of leading questions is likely to result in an incorrect history, it is nevertheless true that a patient may forget having had a symptom at one questioning and recall it at a later one. We therefore feel that the subject of history should be brought up at frequent intervals in conversation with the patient, and pertinent questions asked, although negative answers may have already been given to them. This patient was asked if he had ever had chest pains, front or back, and said that he had not. He later stated that he had had pleurisy prior to the "pneumonia." The usual patient has no knowledge of the significance of symptoms, and so may dismiss from his mind the most enlightening and important part of his history. All symptoms should be gone over in the questioning of the patient, in addition to his story given without questioning. It is often of value to phrase the same question in different ways. For example, the patient might at one sitting be asked whether he has noted that he is easily fatigued, and at the next whether the recent increased volume of work has been a strain on him. It is one of the characteristics of human psychology that a person would rather ascribe fatigue to greater reason for fatigue than to greater susceptibility to fatigue. Since additional history was obtained after the diagnosis we feel that we are to blame in that respect.

The information obtained by physical examination of the chest is seldom or never diagnostic, except in some far advanced lesions. The presence of such signs as rales, impaired resonance, diminished breath sounds, bronchial breathing, and the like is merely evidence that something is wrong. "The significance of morbid signs relates immediately not to disease but to the physical condition incident thereto. Signs are not directly diagnostic of particular diseases." (Austin Flint). The fact that a certain combination of signs represents in a certain percentage of cases, a particular pathogenic agent is of no value to the patient. The patient is not interested in what is wrong with 75 per cent of the persons with his signs

and symptoms; what he wants to know is what is wrong with him, and in our decision on the type of therapy to be used we are confronted by the same need for specificity. This is particularly true in many chest diseases, as treatment for most of the diseases of the lungs may be exceedingly harmful to pulmonary tuberculosis.

Another clue to the diagnosis was the presence of a strongly positive tuberculin reaction. It was long supposed that the presence of a positive tuberculin test indicated only that at some time in the life of the individual there had been tubercle bacilli in the body. It is generally conceded that as a rule the tuberculin test is positive in cases of active tuberculosis, both pulmonary and extrapulmonary. Absent allergy may of course occur, especially in the far advanced group. Musacchio found that 97.7 per cent of 1,000 cases of active tuberculosis showed a positive reaction. There is, however, considerable difference of opinion as to whether sensitivity to tuberculin wanes and finally disappears after healing of the lesion, or after death of the bacilli. If this occurs, and recent evidence seems to indicate that it does, a strongly positive tuberculin test should not be taken lightly. At the Cleveland meeting of the National Tuberculosis Association it was stated that conservative treatment for minimal tuberculosis converted a number of nurses and medical students who reacted positively to tuberculin into negative reactors. This would indicate that the adults showing positive reactions may not be showing the results of healed childhood infection. An arrested tuberculosis lesion and a positive reaction are not necessarily related. The patient, in such an instance, may have lost the sensitiveness that resulted originally from the lesion that is now healed, and have acquired a new sensitiveness as a result of subsequent infection. We do not go so far as to state that a positive tuberculin test indictates tuberculous disease, but it does indicate that everything necessary for the development of disease is present—tubercle bacilli and sensitivity to them. We feel that positive reactions to tuberculin are too often lightly dismissed. It has been stated that the degree of reaction is a measure of the tendency of the individual to the development of sensitivity, and not to the recency or amount of infection. With this we cannot wholeheartedly agree.

The area of increased density in the upper portion of the right lung in the case reported was more or less unusual and would suggest the presence of neoplasm rather than tuberculosis. The fact that densities in the upper portion of the lung are frequently tuberculous does not mean that any specific one is tuberculous. Generalities are easy to quote but difficult to apply to individual cases. This was certainly an unusual case of tuberculosis raidographically, but since roentgenograms are not infrequently atypical in tuberculosis we did not completely discard that diagnosis. The radiologic findings in this case were more typical, in our opinion, of bronchiogenic carcinoma than of anything else, and in particular the roentgenogram made August 8, 1942 (Fig. 6). That a mass was occluding a large bronchus and producing atalectasis seemed fairly certain. The difficulty arose in determining the nature of the mass.

The possibility of lung abscess had also to be considered. Being again confronted by the fact that signs are not directly diagnostic of particular diseases, we resorted to bronchoscopy and lipiodal instillation in an endeavor to clarify the subject, but learned nothing more. The lesion could not be seen and no biopsy could be obtained. A superior pulmonary sulcus tumor was considered unlikely, in view of the absence of pain, Horner's syndrome, or muscular atrophy. Although it has been recommended that an exploration of the thorax be done in such a case, we did not feel that so drastic a procedure was justified while the patient was apparently improving and the lesion showing no change. However, in view of the low percentage of diagnosis in *operable* cases of lung malignancy, we decided to obtain the advice of a thoracic surgeon. Had this case proven to be a malignancy we would no doubt feel that we had already been overly cautious, although all but one of the cardinal signs of malignancy were absent. When the diagnosis was finally made, however, we were so struck by the radiologic similarity to bronchiogenic carcinoma that we are now somewhat doubtful of the value of the many articles being written for the general practitioner concerning the x-ray appearance of lung cancer. Certainly great damage would have been done to this patient by too enthusiastic interference.

It will be noted that this patient falls into the group of suspicion given by Overholt in his recent article. He was (1) in the age group of 40 to 65, (2) the lesion was still confined to the lung, (3) symptoms and signs were minimal, and (4) the x-ray appearance was compatible with carcinoma. While we agree that these criteria are admirable, it is evident that they afford only grounds for suspicion, rather than evidence for a diagnosis.

The final diagnosis in this case was pointed to by the finding of tubercle bacilli in the

sputum. This occured after repeated negative specimens had been examined. We have seen tuberculosis "ruled out" by a number of supposedly capable men (although, we must admit, never by anyone professing to be a pthisiologist), on the strength of a laboratory report. Untold tragedies are wrapped up in the report, "No acid-fast bacilli were found." Until a positive diagnosis has been made sputum examinations should be continued. Unfortunately, the finding of one to four isolated bacilli does not constitute a positive diagnosis, since areas of old infection may be opened by the new pathological process, and a few bacilli slough out. Furthermore, occasional acid-fast bacilli are found in about 20 per cent of carcinoma. If the specimens are repeatedly positive, however, tuberculosis is reasonably certain. Stomach washings are sometimes of value, especially in uncoöperative patients or in children. The main point in successful diagnosis though, is persistence in searching for the cause. With special stains carcinoma cells may sometimes be found in the sputum. While our experience with this examination is limited, we are of the opinion that a report by a competent pathologist of malignant cells in the sputum is sufficient evidence to warrant a diagnosis, even if found in only a single specimen. The finding of fungi in specimens obtained by the expectoration of coughed up sputum has little or no significance, inasmuch as fungi may be found in the mouth of about 25 per cent of healthy persons. This is mentioned only because one may, after a considerable period of time has passed with no positive diagnosis, be inclined to grasp at straws and so give undue significance to such a finding. If fungi are found one must be certain that they come from the lungs before going further. The obtaining of bronchial specimens will clarify this point.

We continued to search for the etiological agent in this case even though the patient was improving, or at any rate holding his own. Many practitioners, especially the older ones, seem to feel that one should not "look a gift horse in the mouth" by interfering with a patient who is doing well. We do not know whether we handled this case correctly. Perhaps we should have done nothing other than observe the progress by x-ray study as long as the patient was showing clinical improvement. Had we pursued a "hands off" policy we feel that we might have been open to criticism for treating a disease without being sure of its nature. Nevertheless, if we had this case to treat over again we would not interfere as much as we did. Either course is open to criticism, but in such a case anything that one might do or fail to do would be. We hope that our experience in this case may aid both us and the reader in similar cases.*

REFERENCES

1. Gowar, F. J. S.: Carcinoma of the Lung; The Value of Sputum Examination in Diagnosis, Brit. J. Surg. 30:193-200 (Jan.) 1943.
2. Long, E. R.: Present Status of Tuberculin Test, Journal-Lancet 62:376-378 (Oct.) 1942.
3. Musacchio, F. A.: A Tuberculin Survey of 1,000 cases of Active Tuberculosis, Am. Rev. Tuberc. 42:120-129 (July) 1940.
4. Overholt, R. H.: Common Masquerading Lung Disease, Dis. of Chest, 9:197-211 (May-June) 1943.
5. Perrone, J. A., and Levinson, J. P.: Primary Carcinoma of the Lung (Report of 115 cases, 36 autopsies and 77 bronchoscopic biopsies), Ann. Int. Med. 17:12-25 (July) 1942.

THE PRESENT STATUS OF THE TUBERCULOUS EYE

A. E. JACKSON, M. D.
FORT WORTH, TEXAS

When Robert Koch, in the year 1882, discovered the tubercle bacillus and by isolation, cultivation and inoculation into animals proved its contagiousness, little did he realize that he was revealing the secret offender which was later to head the list of those producing the most deaths, most suffering and most unhappiness in the human race. It is generally known by the medical profession that the tubercle bacillus either directly or indirectly invades any tissue or organ of the body. The eye is certainly no exception. Ophthalmologists have been accused of not progressing with other specialists in regard to diagnosis and treatment of tuberculosis of the eye. This is easily explained when it is remembered that tuberculosis frequently involves the intra-ocular structures of the eye, and the ophthalmologist is deprived of the advantages of a smear and biopsy—a method used by the other specialists to confirm their diagnosis. Focal infections as a cause of eye diseases as scleritis, iritis, and choroiditis have occupied the throne during the lifetime of those present and have acted as a deterrent in investigations of tuberculosis as a factor. Within the past twenty years the advocates of focal infections as a source of eye diseases and bone and joint infections are dwindling, both among internists and eye physicians. For instance, in the treatment of rheumatoid arthritis in a large series it has been shown that those with infected teeth and tonsils left intact did better than those subjected to radical surgery. In our own field of ophthalmology it has been shown by Woods and co-workers that the incidence of definite focal infection was the same in patients with uveitis as in the non-inflammatory lesions. Likewise, they studied 74 patients with uveitis "probably" due to focal infections over a

Read before the Section on Eye, Ear, Nose and Throat, State Medical Association of Texas, Fort Worth, April 3, 1944.

*Author's Note.—(S. E. T.) May 1, 1945. This patient has had a thoracoplasty and is now apparently well and working.

period of approximately four years and found the incidence of recurrence 29 per cent in those where infection was ignored, 36 per cent in those where infection was partially removed, and 33 per cent in those where infected foci had been completely removed. This would tend to show that the uveitis was not modified by the presence of focal infections and would also tend to show that the indiscriminate wholesale removal of teeth and tonsils is not justified in the treatment of eye infections.

At the same time, this investigative work has gone a long way in leaving the gate open in a search for some other factor as a cause, and tuberculosis is the logical one to be suspected. While finding fault with the dentist and rhinolaryngologist, it occurs to me it would be unfair to pass up the radiologist. His misunderstanding of the relationship between ocular tuberculosis and tuberculosis elsewhere and his resulting negative chest reports have made diagnosis of ocular tuberculosis more difficult. We, as ophthalmologists, need to impress upon them that in cases of suspected ocular tuberculosis we do not expect to find radiologic or clinical signs of an active pulmonary tuberculosis but, on the other hand, the minimum findings of a healed glandular intrathoracic lesion. Such a lesion accounts for immunity which is built up by the gradual release of tubercle bacilli into the blood stream from the lymph node. By the introduction of tuberculo-protein from the tubercle bacillus, allergy or hypersensitivity is developed.

Within the past twenty years and largely as a result of Alan C. Woods and co-workers at Johns Hopkins, allergy and immunity have come to occupy a prominent place in ocular tuberculosis. One of the characteristics of allergy is a reaction of the human body to all foreign proteins. When the tubercle bacillus is deposited in the tissues, the body becomes allergic to tuberculo-protein. However, tubercle formation is not the result of allergy but is a response to the lipoid of the tubercle bacillus. Immunity on the other hand is another change produced when invasion of the organism takes place and consists of a tendency to fix it at the site of entrance, limit its spread, inhibit growth and repair tissue. Allergy is produced by the injection of dead organisms while immunity can be produced only by introduction of living organisms.

Let us consider for a moment the old and new ideas regarding ocular tuberculosis. A controversy has been waging for years between the Europeans, especially the Germans, and Americans, in regard to tuberculosis as the etiology of uveitis. Gilbert, in a series of 500 cases, attributed 62.2 per cent as due to tuberculosis while Haas found 48 per cent in 264 cases. Irons and Brown found not a single case of tuberculosis in a series of 100 cases but were inclined to explain the etiology on the basis of focal infection. As stated before, Woods and co-workers in this country have taken the lead by extensive clinical and experimental work with writings on ocular tuberculosis. In the 1941 program of the Section of Ophthalmology of the American Medical Association they presented a study of 562 cases of uveitis and causes, which seems to upset the original American ideas in this regard. As a result of their study roughly 50 per cent of these causes were attributed to tuberculosis, which is almost identical with the statistics of Haas published in 1930. In searching further, they selected a series of 180 cases diagnosed as ocular tuberculosis (history—x-ray—corneal microscope, *et cetera*) and submitted them to a Mantou tuberculin test, with the following results: 53.4 per cent or 96 cases reacted positively to .001 milligram of Koch's Old Tuberculin; 41.6 per cent or 75 reacted positively to .01 milligram Old Tuberculin, and 5 per cent or 9 reacted positively to .1 milligram Old Tuberculin.

Continuing further, these same workers selected 10 cases in which ocular tuberculosis had been confirmed by biopsy and submitted them to tuberculin diagnostic tests, with the following results: 60 per cent reacted positively to .001 milligram Old Tuberculin; 20 per cent reacted positively to .01 milligram Old Tuberculin; and 20 per cent reacted positively to 0.1 milligram Old Tuberculin.

From this work it is definitely and fairly concluded that a negative tuberculin skin test does not eliminate and a positive does not substantiate tuberculosis as the cause. After all, the only conclusion definitely drawn is that a high degree of skin sensitivity is suggestive of the ocular condition being tuberculous in origin.

Any structure of the eye may become the seat of a tuberculous lesion and is generally considered to be secondary to other foci as glands and lungs, although one type is considered primary and rare, for example, tuberculosis of the conjuctiva, which supposedly occurs through abrasion of the conjuctiva and implantation thereon of the tubercle bacillus. It might be added at this point that this is the only place where the ophthalmologist is privileged to have the aid of smear or biopsy in arriving at a diagnosis without sacrificing vision. Pathologically, ocular tuberculosis falls into one of the three following types:

1. Lesions of the iris, cornea or choroid

lacking symptoms, with tendency to recur, self limiting and creating a suspicion of tuberculosis.

2. Lesion of the iris, choroid or uvea characterized by nodule or tubercle.

3. A lesion rapidly progressive with exudation, caseation and perforation, with destruction in a short period of time.

From a clinical standpoint and for practical purposes it may be said that of all authentic cases of ocular tuberculosis over 90 per cent fall under the classification of uveitis or choroiditis, representing respectively the easier and more difficult cases for diagnosis. The direct diagnosis of ocular tuberculosis, as I see it, is always a presumptive diagnosis and depends on a tuberculous history with insidious onset of eye symptoms, a positive radiograph of healed tracheobronchial glands of childhood, a skin sensitivity to intradermal administrations of tuberculin, characteristic findings of keratitic precipitates revealed by the corneal microscope, and a satisfactory response to gradually increasing doses of tuberculin after other foci have been eliminated. Although the presence of any of the above lends support to the diagnosis, the absence means absolutely nothing. For instance, although hilar tuberculosis is confirmed by x-ray, a negative film does not exclude intrathoracic glandular tuberculosis.

The tuberculin test is a test of allergy and is dependent on a release into the system of the tuberculo-protein from the lymph node. In order for the allergy to be kept at a level it is necessary that the tuberculo-protein be constantly fed into the body from the lymph node or some other foci. A positive test to tuberculin is a fair indication that the tubercle bacillus is or has been present. The strength of the dilution of tuberculin and the amount of reaction aids in weighing the clinical significance of the test. A negative test may mean that the patient has never had tuberculosis, the allergy has never developed or the infection developed long before the test and allergy has disappeared. Other factors producing a negative test are previous treatment with tuberculin and high fever. In performing the tuberculin test, Koch's Old Tuberculin test is injected into the skin according to the Mantou method. The strength of the solution is governed by the location of the lesion and the vulnerability of the tissue involved. Usually, it is safer to begin with a .1 cc. dilution of 1:100,000 dilution. Should an area of edema and redness occur within a period of twenty-four to seventy-two hours the test may be considered positive. Should no reaction appear after the above test, the other dilutions may be tried in a similar way. More recently the American Tuberculosis Society has recommended a product known as P. P. D. or a purified protein derivative consisting of protein extracted from tubercle bacilli cultures whose habit and virulence is well known and purified by a standard chemical solution. The main advantage appears to be in the standardization of the test. With this I have had no experience.

The aim of treatment of tuberculosis of the eye is to remove permanently the ocular sensitivity to tuberculo-protein with later encapsulation and destruction of the bacillus. This is best done by beginning with very small doses and gradually building up at weekly intervals, at the same time avoiding local and focal reactions. A few of the points in tuberculin therapy to remember are: (a) tuberculin may be extremely dangerous and harmful if improperly used; (b) strict coöperation with the internist is very important before and during tuberculin therapy for fear of causing a flare-up of a lesion in some other area, and, in addition, general measures which he may prescribe are beneficial to the tuberculous eye.

In conclusion, the consensus of opinion points to:

1. Tuberculosis is a much more frequent offender as an etiologic factor in iritis, uveitis and chroiditis than has been suspected in the past.

2. Tuberculin is a welcome adjunct to the armamentarium of the ophthalmologist in helping to establish the diagnosis, and from a therapeutic standpoint in arresting the progress of a condition which will ultimately greatly impair vision and possibly produce blindness.

3. Allergy and immunity seem to have taken their places in explaining to a great extent some of the previous and mysterious changes in the tuberculous eye.

REFERENCES

1. Haessler, F. H.: Tuberculosis of the Eye, Minnesota Med. 26:161-167 (Feb.) 1943.
2. Kronfeld, P. C.: Ocular Tuberculosis, Kentucky M. J. 40: 66-70 (Feb.) 1942.
3. Preston, H. G.: Ocular Tuberculosis, A Review and Report of Four Cases, Virginia M. Monthly 68:400-405 (July) 1941.
4. Woods, A. C.; Burky, E. L., and Friedenwald, J. S.: Experimental Studies of Ocular Tuberculosis; Relation of Ocular Sensitivity to Cutaneous Sensitivity in Systemically Infected Rabbit, Arch. Ophth. 19:229-235 (Feb.) 1938.

ABSTRACT OF DISCUSSION

Dr. May Owen, Fort Worth: It is a well established fact that these ocular lesions are rarely found among persons suffering with active pulmonary tuberculosis.

Histological sections from the affected eyes seldom contain typical tuberculous granulomas. The lesions are usually quite small and may or may not contain giant cells. There are varying numbers of lymphocytes and endothelioid cells. Tubercle bacilli are not found in the lesions either microscopically or by animal inoculation but the failure to demonstrate tubercle bacilli does not prove that the condition is not tuberculosis. Since no bacteria have been found in the lesions it is supposed that an allergic reaction to tuberculin is responsible for the granulomas.

Probably no other living agent of disease compares with the tubercle bacillus in its capacity to produce allergic sensitization. The acquired allergy to tuberculin is usually such that positive reactions result from even minor and clinically unrecognized tuberculous infections as well as those apparently healed and inactive. The percentage of positive skin reactions to tuberculin increases from about 5 per cent in infants to 90 per cent in older individuals. Positive skin reactions in older children and adults can not be interpreted as necessarily indicative of active tuberculosis infection. Negative tuberculin reactions are of greater clinical value since they are supposed to indicate the absence of tuberculosis infection.

The allergic capacities of man usually disappear in the presence of an overwhelming infection due to desensitization. False negative reactions occur in very early or incipient stages of tuberculosis before sufficient tuberculin hypersensitiveness has developed. Negative skin reactions may also occur in the severely malnourished, in the aged, during pregnancy as well as during or immediately following some of the acute infectious diseases such as measles, pertussis, or typhoid fever. No tuberculin test accurately distinguishes active from inactive tuberculosis.

Cases have been reported in which sharp and serious flare-ups of ocular lesions have occurred following the subcutaneous injection of tuberculin; however, equally sharp reactions have been reported following the injection of foreign protein.

Dr. Lester H. Guinn, Dallas: Dr. Jackson has given a very fair review of the present status of the tuberculous eye. Europeans and Americans are getting closer together in their views on the etiology of intra-ocular inflammation. Foci of infection and tuberculosis each are etiological factors.

I agree that the diagnosis of a tuberculous lesion in the eye is usually a presumptive diagnosis. The skin test tells us only that the skin is sensitive to tuberculo-protein. Not all cases having had previous tuberculous infection are allergic to tuberculin. Also the ocular sensitivity is not directly proportional to the skin sensitivity in all cases. The production of a focal reaction in an eye by tuberculin is said to be diagnostic, but is extremely dangerous. Woods and Burky have shown that immune-allergic rabbits having virulent human tubercle bacilli inoculated into an eye are benefited by desensitization with tuberculin, the disease running a shorter and less severe course.

I want to emphasize the importance of the general treatment of the tuberculous eye. Rest is the most important and may be responsible for the cure. Freedom from strain, a high vitamin diet, fresh air and sunshine are important.

It is well to emphasize the dangers of tuberculin treatment. It should not be given in the presence of active pulmonary tuberculosis. The patient's reaction point should never be exceeded. If an ocular lesion is actively progressive in a patient with high sensitivity and poor immunological response, great care must be used in the use of tuberculin, employing extremely small doses.

Dr. Ray K. Daily, Houston: Focal infection is a factor in activating the tuberculous process in an organ of low resistance, and the removal of infected foci, such as teeth or tonsils, is perfectly justifiable in cases of chronic tuberculous uveitis. It is true that a positive Mantoux test is not diagnostic of ocular tuberculosis. But it is possible to make an absolute diagnosis by a focal reaction in the diseased eye. Focal reactions have to be induced very cautiously, and they require a very keen diagnostic acumen for their recognition; they consist of a transitory enlargement of the blind spot, a transitory rise in intra-ocular tension, and an accentuation of the local process, diagnosed with the biomocroscope or ophthalmoscope.

There is one practical test which I have had occasion to use within the last year which might be of interest. That is the determination of the activity of a tuberculous process in the choroid. It is not always easy to tell when the process has run its course, and patients often ask for a statement of their condition for the draft board. In such cases, I outline on the stereocampimeter the size of the scotoma caused by the choroidal focus. Then I give the patient a calcium adrenalin ionization, and check the size of the scotoma again. If the process is active, the scotoma will be smaller in size because the calcium diminishes the edema about the focus. If the process has run its course, the size of the scotoma will remain unchanged.

MISCELLANEOUS

COMING MEETINGS AND CLINICS

State Medical Association of Texas. Dr. H. F. Connally, Waco, President; Dr. Holman Taylor, 1404 W. El Paso St., Fort Worth, Secretary.

American Medical Association. Dr. Herman L. Kretschmer, Chicago, President; Dr. Olin West, 535 North Dearborn Street, Chicago, Secretary.

Southern Medcal Association. Dr. E. Vernon Mastin, St. Louis, Mo., President; C. P. Loranz, Empire Building, Birmingham, Ala., Secretary-Manager.

Southwest Allergy Forum. Dr. Ralph Bowen, Houston, President; Dr. George Owen, 910 North State St., Jackson, Miss., Secretary.

Texas Ophthalmological and Otolaryngological Society, San Antonio, December 7-8. Dr. M. K. McCullough, Dallas, President; Dr. E. D. Dumas, San Antonio, Secretary.

Texas Radiological Society. Dr. Palmer E. Wigby, Houston, President; Dr. Asa Seeds, Dallas, Secretary.

Texas Club of Internists. Dr. Merritt B. Whitten, Dallas, President; Dr. Julian C. Barton, 414 Navarro St., San Antonio, Secretary.

Texas Association of Obstetricians and Gynecologists, San Antonio, fall, 1945. Dr. Allen Stewart, Lubbock, President; Dr. Julius McIver, 1314 Medical Arts Building, Dallas, Secretary.

Texas Pediatric Society. Dr. Frank H. Lancaster, Houston, President; Dr. John Ashby, Dallas, Secretary.

Texas Neuropsychiatric Association. Dr. Titus Harris, Galveston, President; Dr. Fred Rogers, Dallas, Secretary.

Texas Railway and Traumatic Surgical Association. Dr. W. B. Reeves, Greenville, President; Dr. Ross Trigg, First National Bank Building, Fort Worth, Secretary.

Texas Society of Pathologists, Dallas, Jan. 27, 1946. Dr. Paul Brindley, Galveston, President; Dr. John J. Andujar, 1300 W. Cannon Ave., Fort Worth, Secretary.

Texas State Heart Association. Dr. Victor E. Schulze, San Angelo, President; Dr. Walter B. Whiting, Wichita Falls, Secretary.

Texas Dermatological Society. Dr. Lewis Pipkin, San Antonio President; Dr. Duncan O. Poth, 1230 Nix Professional Building, San Antonio, Secretary.

Texas Surgical Society, San Antonio, October. Dr. Sam Weaver, Dallas, President; Dr. Walter Stuck, 1426 Nix Professional Building, San Antonio, Secretary.

Texas Association of Medical Anesthetists. Dr. E. D. Embree, Houston, President; Dr. R. A. Miller, 1415 Nix Professional Building, San Antonio, Secretary.

Texas Society of Gastro-enterologists and Proctologists. Dr. James J. Gorman, El Paso, President; Dr. George M. Underwood, 4105 Live Oak Street, Dallas, Secretary.

Texas Society for Mental Hygiene. Dr. Charles W. Castner, Capitol Building, Austin, President; Miss Jennie S. Wilmot, University of Texas, Austin, Secretary.

Texas Orthopedic Society. Dr. E. A. Cayo, San Antonio, President; Dr. Edward Smith, Houston, Secretary.

Texas Tuberculosis Association. Dr. J. B. White, Amarillo, President; Miss Pansy Nichols, Austin, Executive Secretary.

Texas Public Health Association. Major Lewis Dodson, C. E., Eighth Service Command, A. S. F. Office, Service Command Engineer, Room 222, Dallas 2, Texas, President; Mr. Alan C. Love, City Hall, Waco, Secretary.

Texas Chapter American College of Chest Physicians. Dr. S. E. Thompson, Kerrville, President; Dr. Elliott Mendenhall, Dallas, Secretary.

Texas Hospital Association. Lawrence Payne, Baylor Hospital, Dallas, President; Miss Madelyne Sturdavant, 5709 Velasco, Dallas, Secretary.

Third, Panhandle, District Medical Society. Dr. D. D. Cross, Lubbock, President; Dr. George Powers, Amarillo, Acting Secretary.

Fourth District Medical Society, Brownwood, 1945. Dr. V. E. Schulze, San Angelo, President; Dr. J. M. Horn, Brownwood, Secretary.

Fifth and Sixth, Southwest District Society. Dr. Phil A. Bleakney, Harlingen, President; Dr. C. W. Tennison, San Antonio, Secretary.

Seventh, Austin District Society. Dr. Joe Gilbert, Austin, President; Dr. A. A. Terry, Austin, Secretary.

Eighth, Ninth and Tenth Districts Medical Society. Dr. J. T. Tadlock, Dayton, President; Dr. George W. Waldron, Medical Arts Building, Houston, Secretary.

Eleventh District Society. Dr. C. E. Willingham, Tyler, President; Dr. F. E. Felder, Palestine, Secretary.

Twelfth, Central Texas, District Society, Marlin, July 10. Dr. C. M. Simpson, Temple, President; Dr. R. J. Hanks, Waco, Secretary.

Thirteenth, Northwestern, District Society. Dr. J. W. Foy, Seymour, President; Dr. Joe R. Wise, 1212 W. Lancaster, Fort Worth, Secretary.

Fourteenth District Society, Dallas. Dr. W. C. Morrow, Greenville, President.

Fifteenth, Northeast, District Society. Dr. Joe D. Nichols, Atlanta, President; Dr. Henry H. Niehuss, Gladewater, Secretary.

HOSPITALS NEEDING INTERNS AND RESIDENTS

El Paso City County Hospital, El Paso. Capacity 192 beds. George W. Cook, Col., U. S. A. Ret., Superintendent (3 interns Oct. 1, 1945).

Methodist Hospital, Dallas. Capacity 206 beds. C. W. Sensenbach, M. D., Medical Director (1 intern July 1; 3 interns in October).

Nix Hospital, San Antonio. Capacity 145; admissions 5,564. Ellen Louise Brient, R. N., Superintendent (1 intern June 1).

Providence Hospital, Waco. Capacity, 125 adult, 25 bassinets; admissions, 6,500; Sister Mary Vincent, Administrator (1 resident now, $250 per month, plus full maintenance).

St. Paul Hospital, Dallas. Capacity 270 beds. C. W. Sensenbach, M. D., Medical Director (1 intern July 1).

Wichita General Hospital, Wichita Falls, capacity 135; admissions 4,303. Mrs. Margaret Hales Rose, Superintendent (2 resident needed at once. Salary $175.00 and maintenance).

THIOURACIL IN ANGINA PECTORIS

Thiouracil, a drug widely used in recent years for the treatment of toxic goiter, has proved effective in a small group of patients by relieving pain associated with angina pectoris, a common form of heart disease associated with pain, according to preliminary studies reported in the May 26 issue of *The Journal of the American Medical Association.*

Wilhelm Raab, M. D., of the University of Vermont College of Medicine, Burlington, Vt., says that thiouracil medication proved effective in seven out of 10 patients with angina pectoris. In four cases, three of which were severe, the symptoms disappeared entirely during the treatment.

Dr. Raab explained that the treatment which is similar for goiter and angina pectoris has much the same effects in both conditions since the maximum improvement in heart patients was reached when the basal metabolic rate had fallen seven to 27 points below its pre-treatment level. The thiouracil also acts to reduce the metabolic rate in goiter patients.

The Vermont College physician cited the case of one man, age 70, who suffered from attacks of severe heart pain under the breast bone for three years. The pain persisted usually for about five minutes, and at times he could not walk farther than 50 feet without stopping. Thiouracil was given in two periods of four months and five months, respectively. During the first period the attacks disappeared within one month, except for two more isolated attacks, and during the second period three weeks elapsed before the attacks disappeared completely. The patient has since been able to walk and climb hills at a fast pace without any discomfort.

WAR DOG RECRUITMENT LAGS

The total number of war dogs as of May 1, 1945, was 3,357. Of this number 1,368 were at the War Dog Reception and Training Center Fort Robinson, Nebraska, and 1,989 were assigned to the various Army units in this country and in overseas commands. In connection with the procurement of 1,500 additional dogs required for the development of infantry dog platoons desired by the Army Ground Forces for use with combat infantry divisions, the Office of The Quartermaster General reports that of the 58 animals received to date at the War Dog Reception and Training Center fourteen (14) have been rejected as unfit for service. It is expected that in the near future sufficient numbers of serviceable dogs will be made available from civilian sources to insure the success of this program.—S. G. O. Notes, June 15, 1945.

HEALTH CONDITIONS IN HOLLAND

The Netherlands Information Bureau reports that during the four-week period, starting March 1, the death rate in Amsterdam was three times as high as during the corresponding period in 1939. Particularly hard hit were the very young and the very old whose resistance had been lowered by years of undernourishment. There has also been considerable increase in communicable diseases. Diphtheria, which in prewar years showed a rate of 400 to 600 annually, assumed epidemic proportions during 1944 when 7,800 cases were reported in Amsterdam alone.

From 20,000 to 30,000 persons were found to be suffering from hunger edema, while tens of thousands were at the brink of starvation.

GENERAL KIRK REPORTS ON MALARIA EFFECTS

With the prospect of thousands of soldiers returning to this country from malarious regions, Major General Norman T. Kirk, Surgeon General of the Army, made an appeal for a better understanding of the problem so the public will realize that, with a few simple precautions, malaria is not a disease that should give undue concern either to infected service men or to their families.

General Kirk pointed out that families should not consider soldiers infected with malaria a menace to them or the community, provided the malaria sufferer is taking treatment or promptly obtains medical care when symptoms occur.

There are a number of types of malaria, but the two that concern American troops are benign tertian malaria, which is rarely a serious disease, and malignant tertian malaria, which without treatment may be fatal. The latter type is cured by atabrine so that it is not a problem when properly treated. The attacks of malaria which soldiers will suffer after return to this country will be due to benign tertian malaria. This is one type which is of military significance to American troops.

The service man infected with benign tertian malaria can continue with his usual arduous combat duties as long as he takes the necessary small doses of atabrine. Benign malaria is rarely cured by atabrine. However, this drug suppresses the disease. When a man with benign malaria stops taking atabrine, the usual symptoms—chills, fever, headache, and nausea—may appear.

In the majority of cases the disease has run its course after a man has suffered a few relapses, and no permanent damage has been done. Out of

1,000 cases, about one third will have only one attack. There will be about 40 out of 1,000 who will suffer ten relapses, and only about one in 1,000 will have as many as 20 attacks. Relapses become less acute as time goes on.

When attacks do occur, the symptoms are rapidly relieved and all progress of the disease is quickly suppressed if the proper medical care is given the patient. In most cases this can be accomplished within 48 hours, according to General Kirk.

"As a result of prompt and efficient action," he said, "attacks of malaria by themselves cause only brief incapacitation and result in no permanent damage to the body."

General Kirk stressed the point that malaria can be spread only by the anopheles mosquito. Even if a man is infected, the anopheles mosquito cannot transmit the disease unless it has bitten the victim during a relapse and before medical treatment has been secured. In most parts of the United States there is little likelihood of this since mosquito control measures are adequate.

Infected individuals who are not taking regular suppressive medication are particularly subject to relapses if they engage in strenuous work, or if they suffer from exposure, or if they indulge in drinking to excess.

One phase of malaria treatment that causes concern to many victims is the yellow color the skin takes on as a result of using atabrine. This color is not due to jaundice or any other malfunctioning of the body. It is caused directly by the yellow color of atabrine which is deposited in the skin. The yellowness will disappear a few weeks after the use of the drug is discontinued.

Deaths due to malaria since the beginning of the war have been rare. They are nearly always associated with other diseases and with circumstances which cause delayed or inadequate treatment, Army records show. In the early stages of the Pacific war, malaria did more damage to American soldiers than Jap bullets—in disabling troops, but not in killing them.—S. G. O. Notes, June 15, 1945.

MICHIGAN VOLUNTARY MEDICAL SERVICE PLAN

Increase of benefits to subscribers with no increase in rates has been announced by Michigan Medical Service. The additional benefits were made effective April 1, and were enabled by the unusually strong financial position of the Mechigan plan. Nearly 800,000 subscribers are entitled to the new benefits.

Among the liberalizations are: Removal of the previous limit of $150 for surgical service provided under the Schedule of Benefits and performed at the same time or for the same purpose; shortening of the waiting period for maternity care from 10 months to nine months; elimination of the waiting period on other obstetrical services; and provision for emergency surgical services for doctors in hospital out-patient departments.

Continued high public interest in Michigan Medical Service was cited by R. L. Novy, M. D., President.

"As a result of a promotional mailing a short time ago, more than 400 groups wrote in requesting an opportunity to enroll," Dr. Novy said. "Our enrollment representatives are offering the service to these groups as fast as possible."

Michigan Medical Service is sponsored by the Michigan State Medical Society. Its companion organization, Michigan Hospital Service, also instituted an increase in benefits on April 1, but an increase in subscriber rates was necessary to provide for the hospital service increase.

ACTING SECRETARY OF WAR AND SURGEON GENERAL REPORT ON HEALTH OF THE ARMY

In presenting Major General Norman T. Kirk, Surgeon General of the Army, at the Secretary of War's press and radio conference on 24 May, 1945, the Honorable Robert P. Patterson, Acting Secretary of War, said in part:

The war in which we are engaged has produced many seemingly unsurmountable problems, problems without precedent in the development of new weapons, new methods of training, and new tactics. But none of these problems has been more difficult than the problems faced by our Medical Department in caring for the largest American Army in history, fighting in virtually all parts of the world. And yet, despite these problems, no Army at any time in history has achieved a record of recovery from wounds and freedom from disease comparable to that of the American Army in this war.

The Medical Department, its doctors, its nurses, its corpsmen, has saved the lives of 97 out of every 100 men wounded in battle who reach a hospital, compared with 92 in the World War. Seventy out of every 100 wounded overseas were returned to duty and 27 were evacuated to this country.

During the past three years, the Medical Department has maintained a record of less than one death from disease per 1,000 men per year. During the World War, 19 out of every 1,000 men died each year from disease. During the Spanish-American War we lost 26 out of every 1,000 per year, and in the Civil War, 65 out of every 1,000 men died each year from disease.

In all, during this war, 12,000 men died from disease from December 7, 1941, to May 1, 1945. In World War I, 62,670 men died from disease; in the Spanish-American War 3,500 died from disease, and in the Civil War, 336,216 men of the Union and Confederate armies died from disease.

Malaria has been reduced from hundreds of cases per 1,000 men per year to less than 50. The dysenteries, which once put entire regiments and armies out of action, have occurred among less than 90 out of every 1,000 men per year and have been readily controlled. During World War I, 38 per cent of the men who contracted meningitis died, compared with 4 per cent in the present war, and 24 per cent of those who caught pneumonia died in 1918 compared with only seven-tenths of one per cent in this war.

No greater tribute can be paid to the Medical Department of our Army than the tribute paid by its record of saving lives in this war.

It is a record written by Medical Corpsmen following the troops into battle; by doctors performing their surgery amid the bursting of bombs; by the self-sacrifice of American women in the Nurse Corps, laboring long hours under the most difficult of conditions, by thousands of other Medical Department personnel, and by scientific research and development.

The Medical Department today is well prepared for the intensification of its work brought about by the cessation of hostilities in Europe. Thousands of wounded veterans in the European and Mediterranean theaters are being transported to the United States as fast as ships and planes are available. Physicial examinations are being given to each of the 3,500,000 soldiers in those theaters before they are redeployed. And Medical Department personnel will be sent to the Pacific in ever-increasing numbers as our forces are marshalled for the final blows against Japan.

The peak of the Medical Department's activities will not be reached until the fall of 1945. At present, wounded and sick are being returned to this country from all theaters at the rate of 44,000 a

month. This evacuation will continue until all the patients in the European and Mediterranean theaters are removed, which will require 90 days.

The arrival of these thousands of wounded and sick in this country during the next three months will place a heavy load on our General and Convalescent hospitals. The population of all Army hospitals in the United States at present is 290,000. By September, this is expected to reach 315,000, taking into consideration the discharge rate.

It can readily be seen that the Medical Department will be operating at capacity for many months to come and there will be a critical need for its professional and civilian personnel during this period.

General Kirk's statement, in part, follows:

"The Army Medical Department is well prepared to maintain its record of saving lives and guarding against disease in the second phase of World War II which will be centered in the Pacific. As combat activities increase in that area troops moved from European theaters will find a different type of warfare, different diseases and different methods of combating disease. . . . . .

"The main diseases to be encountered in the Pacific are malaria, the dysenteries, scrub typhus, skin infections, schistosomiasis, filariasis and dengue fever. Excellent progress has already been made in keeping the incidence of all of these diseases to a very low degree.

"Malaria, for example, has been reduced to one-fourth its incidence in the early part of the war so that the overall death rate from malaria in the Army is .01 per cent.

"The use of D. D. T. and atabrine is primarily responsible for lowering the incidence rate of the most disabling tropical diseases. The remarkable record in lowering the malaria rate is due also to strict discipline and control measures. Malaria is spread by the anopheles mosquito. D. D. T., a recently developed insecticide, is used to kill this mosquito and the larva. Areas are sprayed with D. D. T. by plane and a five per cent solution of D. D. T. sprayed on barracks walls, in kitchens and huts, killed all mosquitoes and flies alighting thereon for months after spraying.

"The dysenteries, so common in the Pacific areas, which are spread by flies are also rendered less prevalent by the use of D. D. T.

"Atabrine has been found more effective as a therapeutic agent in the control of malaria than quinine.

"Filariasis, which is also spread by the mosquito, is reduced by the use of D. D. T. and mosquito control methods.

"Schistosomiasis is caused by a small fluke found in pools and running streams which in a matter of seconds burrows through the skin and infects the individual. All water found to contain these flukes is posted and personnel is warned not to bathe, wade or wash in it.

"Areas found to contain scrub typhus are immediately burned over, clothing is impregnated, and efforts are being made to develop a vaccine to counteract it.

"Dengue fever, also spread by mosquito, is controlled by the use of D. D. T. and mosquito abatement.

"It can readily be noted that D. D. T. is one of the miracle developments of this war. . . . . .

"The Army Medical Department has complete medical and sanitary surveys of all the territory in the Pacific which is potential battle ground. The health hazards to soldiers are known to the Medical Corps officers who accompany all invasion troops and that knowledge is distributed to all the men.

"The Army Medical Department has been doing a fine job in the Pacific and will continue to do that job as activities in that theater increase. It is true that the pestilential islands of the Pacific have not been changed into gardens of Eden, but when the deplorable health conditions that existed there are compared with what has been accomplished it is obvious that our victory over the Japs will be hastened.

"While all of this work and planning was going on for the increased activity in the Pacific the Army Medical Department during 1944 took care of 4,435,000 patients in hospitals—2,315,000 in the United States and 2,120,000 in hospitals overseas. In addition it provided care for an additional 43,210,000 non-hospitalized patients—those with minor infections and injuries who were only temporarily incapacitated.

"It performed the essential functions of caring for men wounded in battle, the injured and the sick to maintain fighting strength with 45,000 medical corps, 15,000 dentists, 52,000 nurses, 2,000 veterinarians, 18,700 medical administrative corps men, 2,500 sanitary corps specialists, 1,000 physical therapists, 1,500 dietitians, 61 pharmacy corps officers, 535,000 enlisted medical aid men and approximately 80,000 civilian employees.

"Illness and recuperation of wounded and injured men does not cease with a formal declaration of the end of hostilities on any front. The care of these men and women is a continuing responsibility of the Medical Department which will go on for many months in the future. It will increase rather than diminish during the remainder of 1945, according to the best estimates which can be made now. Therefore, as I have said before, medical care by the Army has yet to hit its full stride. One thing I wish to promise is that the best scientific medical attention will continue to be furnished to every man needing it."—S. G. O. News Notes, May 31, 1945.

VENEREAL DISEASE CONTROL

The following is a summary of recommendations—with regard to the result of decisions reached concerning future venereal disease control, made by the venereal disease control committee of the State and Territory Health Officers at the 43rd annual conference of health officers held in Washington, April 9.

It was recommended that venereal disease contact reports from the Army services be sent in duplicate to state health officers, except in large counties or cities where it may be agreed by the service command and the state health officer concerned that follow-up will be expedited by sending one report directly to local health department.

It was recommended that an intensification of efforts to obtain increased coöperation of physicians in private practice in the reporting of venereal disease cases and in obtaining contact information. It was recommended that private physicians be paid for making diagnoses and referring appropriate cases of infectious venereal disease, probably responsive to intensive therapy, to rapid treatment centers, where suitable public health diagnostic facilities are not available. It was recommended that further educational efforts be employed, including personal interviews and correspondence, to inform physicians of their importance in the venereal disease control program.

Penicillin.—It was recommended that penicillin be provided to physicians for the treatment of gonorrhea only, and that it be provided on the same basis as other drugs are provided for the treatment of gonorrhea.

Training VD Investigators.—The committee approved a proposal that the U. S. Public Health Service sponsor a three to nine-month formal training course of VD investigators, both men and women, in one or more colleges, and expressed the belief that

such trained personnel would be given consideration for subsequent employment on State pay rolls as VD investigators if they met State merit system requirements.

Rapid Treatment Centers and Bed Rentals.—The committee recommended that the U. S. P. H. S. make available funds for the rental of beds in hospitals for the treatment of venereal disease responsive to intensive therapy when such inpatient care is more satisfactory to the health department than the establishment of a rapid treatment center. It was recommended that the Public Health Service provide the funds for the continuance of the rapid treatment center program under a project grant plan rather than under the formula used for allocation of regular venereal disease control funds.

Clinics.—Because rapid treatment centers can give complete treatment within a short period of time, especially to primary and secondary cases of syphilis, it was recommended that clinics should be converted largely from treatment facilities to centers for interviewing, case-finding, diagnosis and referral.

30-40 Limit.—It was recommended that clinic treatment of latent cases of syphilis should be terminated when 30 arsenical and 40 bismuth injections have been administered.

Clinic Cost Analysis.—The committee voted approval of a plan whereby the U. S. Public Health Service will obtain, through simplified cost analysis forms, data necessary for uniform analysis of current clinic operations, so that new clinic functions can be adjusted effectively. State health officers will be assisted in obtaining the data by Public Health Service district office personnel; the Public Health Service will provide necessary forms and instructions.

New Clinic Report.—It was recommended that the monthly clinic report be amended to include data regarding diagnostic and referral activity.

May Act.—The committee approved an amendment to or extension of the May Act, being considered by Congressman May, whereby the provisions of the Act would be extended until the war is over or until large bodies of troops are no longer maintained in the United States, or until the President proclaims the termination of the military necessities that require the operation of the Act, which originally was scheduled to expire May 15, 1945.

4-Hour G. C. Treatment.—A 4-hour schedule of penicillin treatment for gonorrhea has been recommended by Dr. J. R. Heller, Jr., Medical Director, Chief of the Venereal Disease Division, United States Public Health Service. The recommendation was made in a memorandum to rapid treatment centers in which it was suggested that the new schedule replace the previously used 15-hour schedule. The memorandum states that in a study of 250 female patients with gonorrhea, using a 4-hour treatment schedule, 50,000 units of sodium penicillin in aqueous solution (2 cc.) every 2 hours for 3 injections, Dr. Ruth Borin Thomas at the Bellevue Hospital Rapid Treatment Center observed that 97.3 per cent passed tests of cure (4 cultures). The patients were held in the hospital for a minimum of ten days to prevent reinfections from confusing results. This "cure" rate compares very favorably with that obtained by giving 150,000 units of penicillin over a 15-hour period. Use of the new 4-hour schedule in rapid treatment centers will conserve time and labor of rapid treatment center personnel, and will permit removal of patients to barracks after a few hours, Dr. Heller said.

New Syphilis Schedule.—It has been recommended that a new schedule of treatment for syphilis patients, employing penicillin in combination with arsenicals and bismuth, be substituted for previously used combination treatments and for most schedules employing penicillin alone in rapid treatment centers. The use of penicillin alone is recommended only for arsenic-sensitive patients and for young patients with congenital syphilis. The discontinued combination schedule, consisting of 8 injections of an arsenical drug, 600,000 units of penicillin, and 3 injections of bismuth, has been used since August, 1944, for comparison with penicillin alone. The new combination schedule specifies 5 injections of an arsenical drug, 1,200,000 units of penicillin, and 3 injections of bismuth. The amount of arsenic was decreased to reduce toxic reactions, and the amount of penicillin was doubled to maintain or increase therapeutic results. In some centers the bismuth will be omitted for every second patient in order to evaluate the therapeutic benefits of bismuth in the combination treatment. Progress of patients selected for evaluation purposes will be reported to the National Research Council.

Certificates.—Certificates for satisfactory completion "of a course of treatment for Treponema Pallidum" are being used by a shipbuilding company in North Carolina as a case-holding device among infected employees. The medical examiner of the shipbuilding company reports that the certificates have been especially useful in encouraging infected Negro workers to complete treatment. The company employed more than 22,000 persons at its peak of operations, and in the course of routine blood testing of employees, there were discovered more than 2,500 whose serologic tests for syphilis were positive.

CONTROL OF RABIES IN DOGS

Rabies in dogs can be controlled by quarantine and by immunization against the disease through a single injection of the vaccine, *The Journal of the American Medical Association* for April 28 reports. *The Journal* says that experiments now have established that the single injection of an antirabic vaccine produces a high degree of immunity in the dog.

"An effective program to control canine rabies," *The Journal* states, "must include quarantine to prevent the spread of the virus by stray dogs and dog traffic. There seems to be no question that canine rabies can be controlled by means of quarantine and vaccination. . . ."

NEWS LETTER OF THE STATE HEART ASSOCIATION

The following news letter was recently addressed by Dr. W. B. Whiting of Wichita Falls, secretary of the Texas State Heart Association, to the members of that organization. It is published here since some of the matters discussed are of general interest to the medical profession of the State. The letter follows:

"The order of the Office of Defense Transportation prohibiting meeting of over fifty persons has forced the postponement of the meeting of the Texas State Heart Association. The 1946 meeting will be held as usual if transportation permits.

"The Association has not been entirely inactive this year. Membership in the American Heart Association is being maintained and dues have been paid.

"The following plans were made at the 1944 meeting: A Rheumatic Fever Committee was appointed to investigate the use of Federal funds in combating rheumatic fever in Texas. A beginning has been made on this work. Committee members for 1944 consisted of the following: Doctors Alfred W. Harris, Dallas, chairman; Walter B. Whiting, Wichita Falls; George M. Decherd, Jr., Galveston; Julian Barton, San Antonio; W. C. Dine, Jr., Amarillo; F. T. McIntire, San Angelo; George W. Parsons, Texarkana; E. W. Rheinheimer, El Paso, Texas.

In conjunction with the above, the Executive Committee of the State Heart Association has prepared

and sponsored programs on rheumatic fever before five county medical societies in North and West Texas at Dallas, San Angelo, El Paso, Wichita Falls, and Texarkana. Programs are planned for other similar meetings next year. Part VII of the Lundy film from the American Heart Association is shown as part of the program.

In the future the State Heart Association plans to use other material obtained from the American Heart Association in sponsoring programs before county and district medical societies.

Annual dues for 1945 are due and payable to the treasurer.

LIBRARY NOTES

The package library consists of collections of reprints and other periodical material on various subjects, prepared for lending to members of the Association. Requests for packages should be addressed "Library, State Medical Association of Texas, 1404 W. El Paso Street, Fort Worth 3, Texas." Twenty-five cents in stamps should be enclosed with the request to cover postage and part of the expense of collecting the material. Only one package may be borrowed at a time, and packages are allowed to remain in the hands of the borrower for 14 days.

Package Service

Packages were mailed from the Library of the State Medical Association to the following during June:

Major E. E. Grossman, Camp Maxey—*Penicillin* (1 article).

Dr. Wallace Byrd, Wharton—(6 journals).

Dr. J. R. Maxfield, Jr., Dallas—*Bones, syphilis* (10 articles).

Dr. F. J. Crumley, Amarillo—*Sclerosis, disseminated* (15 articles).

Dr. L. W. Leggett, Midland—*Hemophilia, therapy* (15 articles).

Ashburn General Hospital, McKinney—(3 journals).

Dr. J. R. Nicholson, San Antonio—*Hospitals, urologic service* (5 articles).

Dr. C. D. Dawson, San Benito—*Sulfonamide, administration and dosage* (14 articles).

Dr. John D. Gleckler, Denison—(2 journals).

Dr. A. J. Phillips, Marshall—*Typhoid, therapy* (14 articles).

Dr. A. O. McCary, Freeport—*Blood Groups* (13 articles).

Dr. Vernon A. Black, Wharton—*Tonsillectomy, complications and sequels* (9 articles).

Drs. Lamm & Lamm, La Feria—(1 book).

Lt. William G. Sauer, Camp Maxey—(6 journals).

Dr. E. L. Hunt, Lubbock—*Teeth, mottled enamel* (9 articles).

Dr. Allan Shields, Victoria—*Tuberculosis, Pulmonary, artificial pneumothorax* (9 articles).

Dr. W. A. Lee, Denison—*Hernia, inguinal* (8 articles).

Dr. P. M. Kuykendall, Ranger—*Rheumatism, palendromic* (2 articles).

Dr. Noble H. Price, Lamesa—*Skin, transplantation* (16 articles).

Dr. H. L. Wilder, Pampa—*Maggot Therapy* (11 articles).

Accessions

Philadelphia, J. B. Lippincott Company—Bierring: Rypin's Medical Licensure and Examinations.

Minneapolis, Modern Medicine—Modern Medicine Annual, 1944.

Baltimore, Williams & Wilkins—Tidy: Synopsis of Medicine, Ed. 8.

Garden City, N. Y., Garden City Publishing Company—Fishbein, editor: Common Ailments of Man.

Philadelphia, The Blakiston Company—Grinker and Spiegel: Men Under Stress.

Summary

Reprints received, 600	Local users, 34
Journals received, 184	Borrowers by mail, 20
Items consulted, 513	Packages mailed, 20
Items taken out, 108	Items mailed, 169

Total items consulted and loaned, 790

MOTION PICTURE LENDING LIBRARY

Motion picture films on medical subjects, 16 mm., both silent and sound, some in color, and suitable for either medical or lay audiences, are available for loan to county medical societies, hospital staffs, or individual physicians, on request. Borrowers will be required to pay only the cost of shipment of the films, by express, with insurance, and for any damage to films while in the hands of the borrower.

Requests for films should be addressed to "Motion Picture Lending Library, State Medical Association of Texas, 1404 West El Paso Street, Fort Worth 3, Texas." A list of available films, with descriptions, will be furnished on request.

The following motion picture films were loaned by Motion Picture Lending Library of the State Medical Association during June:

Bleeding Tendency (Available through the courtesy of Mead Johnson & Company) Hill County Medical Society, Hillsboro.

Eyes For Tomorrow (Available through the courtesy of the Hurst Eye, Ear and Throat Hospital-Clinic, Longview) Camera Club, Lubbock.

Goodbye, Mr. Germ (Available through the courtesy of the Texas Tuberculosis Association) Nazareth Hospital Staff, Mineral Wells.

Roentgen Pelvimetry (Available through the courtesy of Mead Johnson & Company) Nazareth Hospital Staff, Mineral Wells.

Sutures Since Lister (Available through the courtesy of Johnson & Johnson) Nazareth Hospital Staff, Mineral Wells.

NEWS

The U. S.-Mexico Border Public Health Association met recently at El Paso, with an attendance of public health representatives of both nations. Delegates and visitors were welcomed by Mayor Anderson, whose address was responded to by Dr. Frederico Ortiz-Armengol, president of the Association. Surgeon General Parran of the U. S. Public Health Service was one of the distinguished speakers at the conference.—*El Paso Herald Post.*

The Fort Worth Eye, Ear, Nose and Throat Society elected the following officers for the ensuing year, at a meeting June 8: Dr. R. H. Needham, president; Dr. C. R. Lees, president-elect; Dr. Valin R. Woodward, vice-president; and Dr. R. H. Gough, secretary.

Clinical cases were presented by Drs. A. E. Jackson, R. H. Needham and C. R. Lees.—*Fort Worth Star Telegram.*

McCloskey General Hospital Staff, Temple, at its regular monthly meeting, was addressed by the following members of the faculty of the University of Texas School of Medicine, informs the Temple *Telegram:* Dr. Charles T. Stone, professor of medicine; Dr. Titus Harris, professor of neurology and psychiatry; Dr. C. H. Slocum, professor of anesthesiology, and Dr. A. O. Singleton, professor of surgery. The meeting was attended by members of the Bell County Medical Society.

Polio Research Committee Formed.—At the request of Dr. J. M. Dowis, acting health officer for the City of Dallas, a committee of seven physicians has been appointed to conduct extensive research on poliomyel-

itis in the event the disease becomes epidemic during the present year, reports the Dallas *News*. The committee is composed of Dr. S. Edward Sulkin, head of the department of bacteriology of Southwestern Medical College and former director of the St. Louis (Mo.) Virus Research Laboratory, chairman; Drs. Brandon Carrell, John G. Young, Ramsey Moore, and Gladys Fashena, all members of the faculty of Southwestern Medical College; Dr. J. M. Pickard, Dallas County health officer, and Dr. Dowis.

New Medical and Hospital Buildings for Houston.—A 14-story building for offices of doctors and dentists to cost $1,500,000, will be erected immediately adjacent to Hermann Hospital, according to an announcement recently by the Hermann Hospital Board, informs the Houston *Post*. The Board also announced that plans are in preparation for a second Hermann Hospital building to be located immediately across the street from the new office building. Both structures, units of the Houston Medical Center, will be erected as soon as materials are available. The doctors' and dentists' building, to be known as the Hermann Professional Building, will be connected with Hermann Hospital by a tunnel under Fannin Street. Its architecture will conform with the Hermann Hospital and other proposed new buildings in the center. Its base will be 143 feet by 107 feet and it will be finished with faced brick, with Texas pink granite and Texas pink sandstone trim. The roof will be of clay tile.

According to present plans, there will be a penthouse on the fourteenth floor, which will be available for a doctors' club, if desired by the tenants. Ample garage space in the basement will be provided for tenants of the building, while adjacent vacant land, owned by the Hermann Hospital, will be available for parking facilities for visitors.

Houston doctors and dentists have already made tentative reservations for more than 70 per cent of the building space, according to trustees of the Hermann Hospital estate.

Work on plans for the second Hermann Hospital building, which will provide several hundred rooms for patients, has been under way for some time. The building will be located between the office building and the present hospital building.

University of Texas Medical School News.—The Forty-ninth Legislature, recently concluded, appropriated a total of $2,684,376 for the University of Texas School of Medicine, Galveston, including the John Sealy College of Nursing, John Sealy Hospital, State Hospital for Crippled and Deformed Children, and the Galveston Psychopathic Hospital, reports the Galveston *News*. The total appropriation covers the biennium of 1946 and 1947, ending August 31, and provides $1,367,188 for the first year and $1,317,188 for the second year. The difference in the amount appropriated for the two biennium years represents an expenditure of $50,000 provided to repair and equip the Psychopathic Hospital, according to Dr. Chauncey D. Leake, executive vice-president and dean of the University of Texas School of Medicine.

Registration of freshmen students at the University of Texas School of Medicine will be held September 13, according to the Galveston *Tribune*. No freshman classes are being held during the summer. Sophomore, junior and senior students are continuing their classes throughout the summer.

The Army specialized training classes and the Navy V-12 program will be continued at the college next year. Selection of students is now being conducted, including the personnel of the Army and Navy classes.

The next graduating exercises of the School of Medicine will be held at the college in March, 1946, under the accelerated program.

Dr. Charles Pomerat and Dr. Ludwik Anigstein, members of the faculty of the University of Texas School of Medicine, addressed members of the Texas Division of the American Society of Bacteriologists at the recent annual session of that organization at the University, May 26, advises the Galveston *News*.

Pediatric Postgraduate Program.—The University of Texas Child Health program presented a pediatric postgraduate program in coöperation with the Maternal and Child Health division of the Texas State Board of Health, at the Children's Hospital, University of Texas School of Medicine, Galveston, from May 14 to 19, inclusive. The faculty for the program consisted of distinguished guest speakers and members of the staff of the University of Texas School of Medicine. The distinguished guest speakers included Dr. William Bradford, associate professor of pediatrics, University of Rochester School of Medicine; Dr. Herbert C. Miller, assistant professor of pediatrics, Yale University School of Medicine; Dr. Wallace S. Sako, assistant professor of pediatrics, Louisiana State University School of Medicine.

The following program was carried out:

MAY 14, PROBLEMS OF INFANT FEEDING AND CARE

Fundamental nutritional requirements in infant feeding.
Fundamental principles of infant feeding and feeding normal infant.
Specific problems in infant feeding and their diagnosis and solution.
Feeding problems from the pathologist's viewpoint.
Presentation of infant feeding cases. Pediatric staff.
Problem of premature management.
Summary and question period of problems of the day.

MAY 15, SURGICAL PROBLEMS IN CHILDHOOD

General principles of surgical diagnosis and treatment in children.
What should the practitioner know about orthopedic diagnosis and treatment?
The bronchoscopist in diagnosis and treatment of pediatric conditions.
Presentation of clinical problems in pediatric surgery. Surgery, orthopedic and pediatric staff.
Urologic disorders in children.
Treatment of burns in children.

MAY 16, VARIOUS SPECIALTY PHASES OF PEDIATRICS

Neurologic diagnosis in children.
Pediatric and psychiatric problems.
Neurosurgical diagnosis in children.
Skin disorders in children. Clinical demonstration and slides.
Diseases of the eye in children.
Dental problems in children.

MAY 17, INFECTIOUS AND CONTAGIOUS DISEASES

Present status of immunizations recommended in children: Round table discussion of use in smallpox, diphtheria, tetanus, pertussis, typhoid fever, others.
Problems of the meningitis in children—diagnosis and treatment.
Meningitis from the pathologist's viewpoint. Presentation of past clinical cases. Department of Pathology and Pediatrics.
Treatment of scarlet fever.
Treatment of tetanus.
Treatment of pertussis.

MAY 18, PROBLEMS OF RESPIRATORY TRACT INFECTION AND HEART DISORDERS

Treatment of respiratory tract infections in children.
Sinusitis and otitis media in children.
Treatment of pneumonia in children.
General pediatric clinic. Pediatric staff.
The heart in childhood.
Electrocardiography in children.
Rheumatic fever and rheumatic heart disease in children.

MAY 19, DEMONSTRATION OF PEDIATRIC TECHNIQUES

By pediatric and nursing staff: intradermal technics. Method of obtaining blood; subdural taps; encephalography; fluid administration; blood transfusions.
Review of week's study.

New Surgical and Medical Plan for Texas.—Announcement was made recently by Dr. E. H. Cary of Dallas, president of Group Hospital Service, Inc., of the establishment of a new surgical and medical plan as a companion to the Blue Cross Plan now being operated in Texas by Group Hospital Service. The new organization is known as Group Medical and Surgical Service, with Dr. Cary as its first president. The announcement followed a meeting of the board of directors, held at the Dallas Athletic

Club, June 19, for the purpose of officially initiating the program. Other officers elected in addition to Dr. Cary are Robert Jolly, hospital administrator, Houston, vice-president; Dr. L. N. Markham, Longview, vice-president; Mrs. Margaret Hales Rose, hospital administrator, Wichita Falls, secretary, and J. Howard Payne, hospital administrator, Dallas, treasurer, informs the Dallas *Times Herald*.

The plan will function with a board of twenty-seven directors who, in addition to the officers named, are Charles F. Ashcroft, Sulphur Springs; Dr. John H. Burleson, San Antonio; Earl M. Collier, Abilene; Dr. H. F. Connally, Waco; George B. Dealey, Dallas; Dr. J. Charles Dickson, Houston; Dr. George R. Enloe, Fort Worth; Dr. J. Anderson Fitzgerald, Austin; Mrs. Alfreda P. Hassell, San Antonio; Harry G. Hatch, Amarillo; C. J. Hollingsworth, Lubbock; W. E. Justin, Fort Worth; Dr. Chauncey D. Leake, Galveston; Dr. F. T. McIntire, San Angelo; M. J. Norrell, Dallas; Lawrence Payne, Dallas; Dr. B. E. Pickett, Carrizo Springs; Mrs. Josie Roberts, Houston; Dr. E. A. Rowley, Amarillo; Ben Taub, Houston; Tol Terrell, Fort Worth, and Sister Mary Vincent, Waco.

W. R. McBee, executive director of the Texas Blue Cross Plan, will serve as executive director of the new medical and surgical corporation.

The plan provides a complete schedule of surgical benefits, obstetrical care and up to $3 a day for medical cases treated in the hospital, after the first seven days, and for a period of 28 days during any year.

It was announced that the joint services will be available to new groups and the new service will be made available to employed groups now participating in the Blue Cross program.

The American Congress of Physical Medicine announces cancellation of the annual scientific and clinical session for 1945, which was scheduled to be held in New York City, September 5 to 8.

Military Personals

Col. James W. Bass, M. C., A. U. S., city health officer of Dallas prior to entry into the service, was recently promoted to the rank of full colonel by General MacArthur, according to General Headquarters Public Relations Office, somewhere in the Philippine Islands. As chief of the preventive medicine service, office of the chief surgeon, headquarters, U. S. Army Services of Supply, Colonel Bass planned and supervised under three different chief surgeons prevention of all types of disease, including malaria, scrub typhus, and other disabling conditions. Colonel Bass is one of the medical corps officers who received chief credit for reducing the incidence of malaria in New Guinea by 95 per cent within a few months. The Central Medical Records Office of the Southwest Pacific Area Command is part of the preventive medicine service under the direction of Colonel Bass. The preventive medicine service is also concerned with planning proper nutrition for all troops, for sanitation, immunization, and similar preventive measures. A reserve officer for twenty years, Colonel Bass was called to actvie duty as a major in 1941. He arrived in the Southwest Pacific in March, 1942, and was immediately assigned to General MacArthur's headquarters as sanitation and statistics officer. He later was assigned to the office of the chief surgeon to assume his present position as chief of preventive medicine.

The Office of the Surgeon General reports the following recent promotions of Army medical corps officers from Texas: *Col. Alfred August Grebe, M. C.*, Ellinger, Texas, and *Col. Clark Bolton Meador, M. C.*, Abilene, from lieutenant colonel; *Lieut. Col. Floyd Alvin Norman, M. C., Dallas*, and *Lt. Col. Malcolm Liddell Johnson, M. C.*, Paris, from major.

Dr. C. F. Skripka, San Antonio, was recently tendered the commission of Lieutenant (jg) M. C., U. S. N. R., and ordered to report to the United States Naval Hospital, Corpus Christi, Texas, June 11.

Personals

Dr. Edgar G. Ballenger, Atlanta, Georgia, president of the Southern Medical Association, died June 1, 1945. Dr. Ballenger, who lived at the Georgian Terrace Hotel, apparently fell seven stories down the hostelry stairwell. He had complained of feeling dizzy when served breakfast by a Negro attendant in his room on the seventh floor, shortly before the fatal fall.

Dr. E. Vernon Mastin, St. Louis, Missouri, elected vice-president of the Southern Medical Association at the last annual meeting, became president upon the death of Dr. Ballenger.

Dr. T. B. Taylor of Pleasanton, formerly of Elgin, announced his sixtieth anniversary of active practice as a physician, May 6, 1945, reports the Elgin *Currier*.

Dr. Mary Walton, U. S. Public Health Service, was recently appointed Hidalgo County health officer, advises the Edinburg *Review*.

Dr. Lamar Byers, formerly director of the Hidalgo County Health Unit, succeeded Dr. Mary Walton as director of the Paris-Lamar County Health Unit, informs the Paris *News*.

Marriages

Dr. John Trenton Tucker, Jr., Fort Worth, was married to Miss Dorothy Dee Hill, Dallas, June 2. Dr. Tucker is the son of Dr. and Mrs. J. T. Tucker of Fort Worth, and is a graduate of Southwestern Medical College. The couple will live in Fort Worth, where Dr. Tucker is a member of the staff of St. Joseph's Hospital.

Dr. Ruth Isadora Allen, Dallas, was married May 14, in Dallas, to Capt. Logan Underwood Mewhinney of Holland. Mrs. Mewhinney, who has been associated for the past year with Dr. Sally Provence in a pediatrics clinic in Dallas, graduated from the University of Texas School of Medicine, Galveston, and served an internship at Woman's Hospital, Philadelphia, Pennsylvania.

SOCIETY NEWS

Gray-Wheeler Counties Society

May 17, 1945

(Reported by H. L. Wilder, Secretary)

Mediastinal Tumor: Case Report—R. D. Falkenstein, Pampa.
Nasal Foreign Body: Case Report—C. E. High, Pampa.
Mediastinal Tumor, with Report of a Case—R. Malcolm Brown, Pampa.
Vaginal Hysterectomy—J. W. Kelso, Oklahoma City.

Gray-Wheeler Counties Medical Society met May 17, at the Hillson Cafe, Pampa, with ten members and visitors present. The scientific program as given above was carried out.

The case of mediastinal tumor reported by Dr. Falkenstein occurred in a baby, four months of age. The growth was rapid, causing death in a short period of time. The case was particularly interesting because of its rarity.

C. E. High reported the removal of a cherry seed from the nose of a woman. The patient stated she remembered having introduced the seed when she was a child, twenty-seven years previously. The seed was exhibited by Dr. High. It was covered with calcium resembling a rhinolith.

The paper of R. Malcom Brown on mediastinal tumor cited a case occurring in a boy of 18. A roentgenogram was exhibited showing the tumor and pleural effusion filling the entire left chest cavity. The boy is still alive although the tumor had been

diagnosed as a teratoma a year previously. Discussion of the case was general.

J. W. Kelso illustrated his paper on vaginal hysterectomy with lantern slides showing all the steps of the operation. Indications and contraindications were well presented. It was pointed out that in cases of uterine prolapse in women of advanced age the operation is performed under spinal anesthesia with a much less mortality than suprapubic hysterectomy.

During a business session communications were read, including letters from Jeff L. Reese, director of Public Relations of the State Medical Association, complimenting the Society on its activity and opposition to undesirable legislation in the Forty-ninth Legislature.

Hidalgo-Starr Counties Society

June 14, 1945

(Reported by Ottis Walker, Secretary)

A Report on the Opinion Research Committee of the National Physicians Committee—H. E. Whigham, McAllen.
Sick Headache—E. D. Wells, Mercedes.

Hidalgo-Starr Counties Medical Society met June 14, in the Cactus Tea Room, Mission, with eleven members and two visitors present. The program as given above was carried out. H. E. Whigham exhibited lantern slides prepared by the National Physicians Committee, giving pertinent data regarding the interest of the public in prepaid plans for medical service, and the attitude of the public toward socialized medicine. An extended discussion was had following the showing of the slides, on the general needs of medical care.

The paper of E. D. Wells was discussed by L. H. Moore, N. C. Ice, R. W. Pence and F. E. Osborn, the discussion being conducted by the question and answer procedure.

Jefferson County Society

June 11, 1945

(Reported by L. R. Byrd, Secretary)

The Present Day Consideration of Coronary Artery Disease—George Hermann, University of Texas School of Medicine, Galveston.

Jefferson County Medical Society met June 11, at St. Mary's Hospital, Port Arthur. The scientific program as given above was carried out. The paper of Dr. Hermann was discussed by H. B. Eisenstadt.

Announcement was made regarding the holding of a crippled children's clinic at Port Arthur on June 14, by G. W. N. Eggers and associates on the faculty of the University of Texas School of Medicine, Galveston.

A communication from the State Secretary was read with regard to a case of a member expelled from the Society, which had been appealed to the Judicial Council of the American Medical Association. It was voted that the State Secretary be requested to represent Jefferson County Medical Society at the hearing, provided such representation is required.

AUXILIARY NOTES

Officers of the Woman's Auxiliary to the State Medical Association of Texas: President, Mrs. C. B. Alexander, San Antonio; President-Elect, Mrs. George Turner, El Paso; First Vice-President, Mrs. S. M. Hill, Dallas; Second Vice-President, Mrs. L. W. O. Janssen, Corpus Christi; Third Vice-President, Mrs. Troy A. Shafer, Harlingen; Fourth Vice-President, Mrs. Mark H. Latimer, Houston; Treasurer, Mrs. F. R. Rugeley, Wharton; Recording Secretary, Mrs. Paul H. Power, Waco; Corresponding Secretary, Mrs. Wilbur Robertson, San Antonio; Publicity Secretary, Mrs. E. L. Howard, Fort Worth; Parliamentarian, Mrs. W. R. Klingensmith, Amarillo.

AUXILIARY NEWS

Bowie-Miller Counties Auxiliary held its annual business meeting May 25, at the home of Mrs. Roy Baskett, Texarkana. Following annual reports new officers were installed to serve during the incoming year as follows: Mrs. William Hibbitts, president; Mrs. N. B. Daniel, president-elect; Mrs. Roy Baskett, first vice-president; Mrs. H. J. Rives, second vice-president; Mrs. Allen Collom, third vice-president; Mrs. L. J. Kosminsky, fourth vice-president; Mrs. Ralph Cross, recording secretary; Mrs. A. G. Lee, corresponding secretary; Mrs. Chester Kitchens, treasurer; Mrs. Joe Tyson, historian; Mrs. Reavis Pickett, publicity; and Mrs. R. R. Kirkpatrick, parliamentarian.

During the social hour, refreshments were served by the following hostesses: Mrs. Baskett, Mrs. Brooks Tate, Mrs. E. M. Watts and Dr. Frances Spinka.

The meeting was followed by an impressive memorial service honoring the late Mrs. L. H. Lanier, a valued member of the Auxiliary. Services were conducted by Rev. Bruce H. Price before a table beautifully arranged as an altar and with Mrs. Lanier's picture centered on the table.

Mrs. James Watlington played "Chorale" (Bach) while Mrs. Ralph Cross lit the candles. Mrs. Will Quinn sang "Crossing the Bar," accompanied by Mrs. Watlington. Reverend Price gave a beautiful tribute to Mrs. Lanier.

Dallas County Auxiliary held its last meeting of the year May 2, at the home of Mrs. S. M. Hill, Dallas. Mrs. Cecil O. Patterson presided over the annual business session.

Officers for the ensuing year were installed by Mrs. O. M. Marchman, as follows: Mrs. Joseph H. McCracken, president; Mrs. J. Forest Buchanan, president-elect; Mrs. Dayton G. McBride, first vice-president; Mrs. Sydney S. Baird, second vice-president; Mrs. J. Dennis O'Brien, third vice-president; Mrs. Guy Tittle, recording secretary; Mrs. T. W. Bywaters, corresponding secretary; Mrs. Harry B. Sowers, treasurer; Mrs. Hall Shannon, parliamentarian; Mrs. J. R. Maxfield, Jr., publicity; Mrs. U. P. Hackney, historian.

At the conclusion of the session, members of the courtesy committee were hostesses at a coffee, with Mrs. Joseph H. McCracken, incoming president and Mrs. C. O. Patterson, retiring president, presiding at the coffee services.

The executive board of the Auxiliary held a meeting May 1, at the home of Mrs. John E. Ashby, Dallas.

Dallas County Auxiliary is coöperating with women's auxiliaries of the Dallas County Dental Society and the Dallas County Pharmaceutical Association in activities connected with the annual medical library banquet, for the purpose of securing funds for the library of Southwestern Medical College, Dallas.

El Paso County Auxiliary installed officers for the ensuing year at a luncheon meeting, May 29, at the El Paso Country Club.

Following a brief business session, Mrs. George Turner, El Paso, recently elected president-elect of the State Auxiliary, gave a report of the state executive board meeting at San Antonio, which she attended. Mrs. Turner reviewed the principal functions of the Auxiliary, which are educational, legislative, philanthropic, social and public relations. Under the last heading, she stressed the need to accept leadership in other women's organizations, particularly in health work, and the promotion and distribution of *Hygeia*, the only official authoritative health magazine for laymen. She stressed the importance of educating the public to the desirability of having an annual physical examination. Mrs. Turner also emphasized that members of doctors' families should also have such examinations and each doctor's wife should bear the responsibility of seeing to it that her husband secures necessary rest.

Mrs. W. J. Davis, outgoing president, presented the gavel to Mrs. R. F. Thompson, with appropriate remarks, to which Mrs. Thompson responded, expressing the earnest determination to uphold the high aims of the Auxiliary.

Mrs. Thompson then introduced chairmen of standing committees for the new year, as follows: Mrs. J. Travis Bennett, state library; Mrs. William Davis, year book; Mrs. S. J. Gaddy, ways and means; Mrs. Grady Causey, vital statistics; Mrs. Leigh Wilcox and Mrs. John D. Martin, telephone; Mrs. F. O. Barrett and Mrs. George Edwards, social; Mrs. Paul McChesney, cadet nurses' recruitment; Mrs. R. B. Homan, Sr., and Mrs. C. H. Mason, Red Cross sewing; Mrs. Andrew Eck, war work activities; Mrs. H. Earl Rogers, publicity; Mrs. J. L. Green, music; Mrs. E. W. Rheinhemer, physical examinations; Mrs. James W. Laws, Hygeia; Mrs. Jesson Stowe, public relations; Mrs. John D. Peticolas and Mrs. George Turner, program; Mrs. George Brunner, parliamentarian; Mrs. R. B. Homan, Jr., budget; Mrs. Jacob Rogde, child welfare; Mrs. Harry Varner, civic; Mrs. Leslie Smith, courtesy; Mrs. Frank Schuster, decoration; Mrs. A. D. Long, historian and Mrs. Joe Carter, membership.

Taylor-Jones Counties Auxiliary held its annual book tea May 18, in the nurses' library at Hendrick Memorial Hospital, Abilene. Approximately fifty volumes were presented to the library.

Mrs. L. W. Hollis, Jr., new president, gave a report on blood plasma work done by the Auxiliary under the leadership of Mrs. Hollis and Mrs. W. V. Ramsey.

Mrs. T. B. Bass expressed appreciation for the Auxiliary of the work done by Mrs. C. L. Prichard, retiring president, to which remarks Mrs. Prichard graciously responded.

Mrs. T. Wade Hedrick was general chairman for the book tea arrangements.

BOOK NOTES

*__Fertility in Men.__ A Clinical Study of the Causes, Diagnosis, and Treatment of Impaired Fertility in Men. By Robert Sherman Hotchkiss, B. S., M. D. Lieutenant Commander (M. C.) U. S. N. R. (on active duty); Assistant Professor of Urology, New York University Medical College; Instructor in Surgery (Urology) Cornell Medical College. With a foreword by Nicholson J. Eastman, M. D., Chairman, Editorial Committee, National Committee on Maternal Health. 95 illustrations. Cloth, 216 pages. Price, with companion book, $8.00. Philadelphia, J. B. Lippincott Company, 1944.

These companion volumes, Fertility in Men and Fertility in Women, are extremely timely and should be welcomed by the profession at large. The authors are to be congratulated on their works, which, though done in separate fields, keep continually before us the thesis that the investigations have but one common single object—the causes, diagnosis and treatment of impaired fertility in men and in women. Since this study and treatment and correction of sterility or impaired fertility must always be directed at both conjugal partners, the authors are to be commended that they have attacked the problem with that one thought uppermost in their minds.

Fertility in Men is a frank, concise presentation of the problem, especially treating the causes of impaired fertility whether anatomical, endocrine, chemical or otherwise. The study of anatomy, physiology, and pathology of the male genital organs is summarized in about fifty pages, which, of course, could as well be found elsewhere. The discussion in the chapter on the metabolism of spermatozoa and chemical composition of semen is well presented. An outline of laboratory tests and study of morphology as well as variabilities and characteristics of semen follows. The problem of treatment of specific cases is then presented and the author takes up in turn the discussion of therapy under the following pattern: volume, turbidity, viscosity, motality, cell content and morphology. Under cell content, the causes of azoospermia are discussed and where no obstruction in the vas or epididymides is found the technic of proper procedure of testicular biopsies is well treated.

In cases of sterility in the married couple where no cause is to be found on the distaff side, this volume presents an excellent attack upon the problem of impaired fertility in the male. The book is well arranged, the illustrations and photographs clear and distinct, and the method of outlining the entire treatise is excellent both for study and reference.

*__Fertility in Women.__ Causes, Diagnosis and Treatment of Impaired Fertility. By Samuel L. Siegler, M. D., F. A. C. S. Attending Obstetrician and Gynecologist, Brooklyn Women's Hospital; Attending Gynecologist, Unity Hospital. With a foreword by Robert Latou Dickinson, M. D. 194 illustrations, including 40 subjects in full color on 7 plates. Cloth, 450 pages. Philadelphia, J. B. Lippincott Company, 1944.

This companion book to Fertility in Men is also evidence of exhaustive study and clinical experience. It is twice as large in volume as its companion book but nowhere could it be abbreviated without damage to the subject matter. The illustrations are excellent, especially the photographs of the various types of endocrine disorders and also the illustration of methods of procedure and technique in treatment and diagnosis. The first four chapters deal with the problem of human fertility, methods of evaluating fertility, the history, and the physical examination.

Chapter 5 is a presentation of the physiology of the female sex cycle in the light of our knowledge gained from laparotomy, recovery of ova, endometrial biopsy, vaginal biopsy, chemical study of hormones and mechanical study of means of the potentiometer and the spectroscope. The conclusion of Chapter 5 should be digested by every student of gynecology and should impress us with the futility of making dogmatic statements relative to the phenomenon of menstruation: "Ovulation may occur in the human female at any period in the cycle—particularly from the eighth day of the onset of the menstrual period to the twentieth day of a 28-day cycle; conception takes place only at ovulation; menstruation will usually occur from fourteen to sixteen days after such ovulation has taken place, regardless of the interval of time between such menstrual cycles."

Chapter 6 treats of cervical and vaginal secretions in relation to spermatozoa, a subject that has been written about exhaustively before. The effect of viscosity of the cervical secretions and the P*h* of the vaginal secretions upon the motility of the spermatozoa is well presented, including the Huhner postcoital test and the Kurzrok-Miller Lytic test.

The tubal factor is presented in Chapter 7, and the conditions of tubal stenosis and tubal spasm are well treated with excellent illustrations of the method of tubal insufflation and hysterosalpingography, as well as comparative merits of carbon dioxide insufflation and iodized oil injections.

Under treatment, prophylaxis is clearly discussed, and the study of the various endocrine types where

*Reviewed by Allen T. Stewart, M. D., Lubbock, Texas.

sterility will result is well in order. The importance of the control of venereal disease, premarital advice and examination as well as proper medical advice on fertility control (contraception) concludes this chapter.

Treatment of ovarian imbalance by endocrines, irradiation and surgery, perhaps the best portion of the book, especially to those who are striving to evaluate the best methods of procedure to make an ovary perform its duty and discharge the ovum, is discussed in Chapter 9. The author is to be congratulated upon his sane attitude toward the importance of endocrines in this problem. In speaking of the use of pregnant mare's serum, he states: "Divergent opinions are expressed as to the capability of the hormone of pregnant mare's serum for inducing ovulation and corpus luteum formation in the human. By and large, continued substitution therapy of the pituitary gonadotropin is necessary for the maintenance of the normal cycles. With our present commercial preparations this is not possible, not only economically, but also because of antihormone formation and the possibility of reversible action of the gonads so stimulated. Clinical reports since 1937, on the use of this hormone for the relief of sterility as a result of defective follicle maturation and ovulation or sperm function due to pituitary imbalance, have not been constant and conclusive." To the reviewer, it was a matter of extreme interest and no little astonishment to learn that low dosage irradiation of the pituitary and ovaries has been found to be efficacious in the treatment of certain menstrual disorders and has been given more credit than hormonal therapy in restoring a cyclic menstruation. The surgical treatment of ovarian imbalance is concise but complete. While discussing surgical treatment of the ovary, it would have been well to have continued with the discussion of salpingostomy in the same chapter as this very kindred subject.

Chapter 10 concludes with a presentation of the subject of artificial insemination, problems, technics and causes. Here again the author keeps his feet on the ground, and makes this significant statement: "Both artificial insemination and the indiscriminate use of glandular therapy have replaced currettage as the empirical panacea for sterility and should be as forcefully discountenanced."

Here we think the book could have been concluded but the author appends a chapter on abortion which could well be omitted without weakening his treatment of the subject of sterility since his treatise is more to solve the problem of union of ova and sperm than the preservation of its development in utero.

The family doctor, the urologist, the gynecologist, and the obstetrician, all should have these two volumes as ready referances.

DEATHS

Dr. Lee Franklin Crook died April 20, 1945, at his home in Bellevue, Texas, of angina pectoris.

Dr. Crook was born August 15, 1869, at Jack's Creek, Tennessee, the son of W. M. and Ellen Elizabeth Crook. He came to Texas in a covered wagon with his parents in 1875, who located at Cleburne. His academic education was received in Weatherford College, from which he was graduated in 1892. He then attended Baylor University for two years. His medical education was received in Vanderbilt University School of Medicine from which he was graduated with an M. D. degree in 1898. He began the practice of medicine at Cresson, Texas, where he remained for twelve years. He then removed to Bellevue, where he had been in active practice for the past thirty-three years.

Dr. Crook was a member continuously in good standing throughout his professional life of the State Medical Association and the American Medical Association through the county medical societies where he resided. He was also a member of the Northwest Texas District Medical Society. He had served Clay-Montague-Wise Counties Medical Society as president and several terms as delegate to meetings of the State Medical Association. He took an active part in the church and civic life of his community. He served for a number of years as president of the board of trustees of the Bellevue schools. He was a member of the Baptist Church, which institution he had served as deacon for thirty-five years. He was a Past Master of the Bellevue Masonic Lodge and was a Woodman of the World. He was genuinely beloved by the large clientele which he had competently served as a family physician for many years.

Dr. Crook was married November 7, 1900, to Miss Rosa Lavina Hardesty who died June 7, 1906. On April 11, 1909, Dr. Crook was married to Miss Margaret Adeline Bobo, who survives him. He is also survived by one son by his first marriage, L. F. Crook, Jr., San Diego, California, and one son by his second marriage, James Crook, Garland, Texas; one brother, John W. Crook, Sherman, Texas, and two grandchildren.

Dr. Dewey Sutton of San Angelo, Texas, died June 2, 1945, in a San Angelo hospital, of cerebral hemorrhage.

Dr. Sutton was born November 15, 1883, in Danville, Illinois, the son of Harmon and Emily Sutton. His academic education was received in the University of Louisville. His medical education was obtained in the University of Pennsylvania, from which he was graduated in 1910. During his active career, he did postgraduate work in the University of Vienna in 1926 and again in 1933. After his graduation he served an internship in Bellevue Hospital Medical College, New York City. He began the practice of medicine at Wolsey, South Dakota, where he remained one year. He then lived and practiced at Redfield, South Dakota, for sixteen years, and at Abilene, Texas, for one year, prior to his location at San Angelo. He had been in active practice at San Angelo for the past sixteen years.

Dr. Sutton had been a member of the Tom Green County Medical Society, State Medical Association and American Medical Association continuously during his residence in San Angelo. He specialized in surgery and urology. During World War I, he served as a first lieutenant in the medical corps of the Army, being stationed at Camp Lewis, Washington. Dr. Sutton was held in the greatest esteem by his medical associates and the citizenship of San Angelo.

Dr. Sutton is survived by his wife, the former Miss Grace Corley of South Dakota, to whom he was married in 1913. He is also survived by a son, Stanley Sutton, Artesia, New Mexico; two brothers, Will Sutton, Bonesteel, South Dakota, and Holly Sutton, Storm Lake, Iowa; one sister, Blanche Sutton, Sioux Rapids, Iowa; and two grandchildren.

Dr. Richard Alexander Hale of Houston, Texas, died May 20, 1945, in a Houston hospital, of heart disease.

Dr. Hale was born December 10, 1892, in Camilla, Texas, the son of W. B. and Mary (McGowen) Hale. His academic education was received in the public schools and Southwestern University, Georgetown. His medical education was obtained in Tulane University School of Medicine, New Orleans, from which he was graduated in 1919. After his graduation he served internships in Presbyterian and Charity Hospitals, New Orleans. He then practiced in New Orleans from 1919 to 1928 at which time he moved to Houston. He had been in the active practice of surgery in Houston since 1928. He had been associ-

ated during that period of time with the Park View Hospital, of which he was part owner.

Dr. Hale had been a member for many years of the Harris County Medical Society, State Medical Association and American Medical Association. He was also a member of the South Texas District Medical Society and the Houston Academy of Medicine. During his years of practice in New Orleans, he was a clinical instructor in surgery in the Tulane Postgraduate Medical School and was assistant visiting surgeon at Charity Hospital. After his removal to Houston, he served as city health officer of Southside Place, Houston. He was a member of the Methodist Church and a Mason. He was a member of the Lions Club. Dr. Hale was recognized by his associates as an accomplished physician and surgeon and he will be sorely missed.

Dr. Hale was married in 1927 to Miss Ollie Dwyer of New Orleans. Mrs. Hale died April 1, 1943. He is survived by a son, Richard A. Hale, Jr., Houston; three sisters, Miss Bessie Hale, Camilla, Mrs. Lester Ricks, Houston, and Mrs. Jack Murchison, Palestine; and three brothers, E. D. Hale and W. G. Hale, of Camilla, Texas, and Dr. Douglas Hale, of Coldsprings, Texas.

Dr. William Floyd Etter died May 14, 1945, at his home at Rogers, Texas, of pneumonia following a cerebral hemorrhage.

Dr. Etter was born February 8, 1868, in Rural Retreat, Virginia, the son of Stephen Sanders and Sarah (King) Etter. His medical education was received in the College of Physicians and Surgeons, Baltimore, Maryland, from which he was graduated in 1892. He began the practice of medicine in Indian Territory in 1893, where he remained until 1900. In 1900, he located in Rogers, where he had been in active practice for the past forty-five years.

DR. W. F. ETTER

Dr. Etter was a member throughout his professional life of the State Medical Association and the American Medical Association through the Bell County Medical Society, of which he was a charter member. At the time of his death he had been proposed for honorary membership in the State Medical Association by Bell County Medical Society, and only the failure of the House of Delegates to meet, because of war conditions, prevented his election to that status. He had served as health officer of Rogers for many years and also as local surgeon for the Santa Fe Railway. He was a member of the Methodist Church, a Mason, and an Odd Fellow. He was held in the greatest esteem by his community.

Dr. Etter was married December 17, 1902, to Miss Cretys Shipp in Belton, Texas. He is survived by his wife; two daughters, Mrs. H. E. Cadwell, Dallas, and Mrs. Lorraine Whittington, Houston; one brother, Guy S. Etter, Rural Retreat, Virginia; and three sisters, Mrs. A. M. Stone and Mrs. W. H. Wampler, Rural Retreat, Virginia, and Mrs. M. D. Copenhaver, Crockett, Virginia; and a granddaughter, Mrs. J. W. Dorrill, Houston.

Dr. John Mark O'Farrell of Houston, Texas, died May 23, 1945, in a Houston hospital, of cerebral hemorrhage.

Dr. O'Farrell was born May 15, 1866, in Troy, Alabama, the son of J. B. and Eugenia (Durham) O'Farrell. He came to Texas with his parents at the age of five. His academic education was received in Professor Looney's Academy at Atlanta. His medical education was received in the Memphis Hospital Medical College, from which he was graduated in 1891. He practiced medicine in East Texas before moving to Richmond, Fort Bend County, Texas, in 1896, where he lived until 1920. He then moved to Houston which was his home for the remainder of his professional life. He retired from the active practice of medicine and surgery four years ago because of ill health.

DR. J. M. O'FARRELL

Dr. O'Farrel was a member continuously during his professional life of the State Medical Association and American Medical Association through the Fort Bend County Medical Society while residing at Richmond, and through the Harris County Medical Society after his location in Houston. He was elected an Honorary Member of the State Medical Association in 1942, which membership status continued until his death. He was also a member of the South Texas District Medical Society and the Houston Academy of Medicine. He served the State Medical Association as Chairman of the Section on State Medicine and Public Health in 1911. He was a past president of the South Texas District Medical Society. He served as a member of the House of Delegates of the State Medical Association for twenty-one years during his active medical career. While living in Richmond, he established and operated a hospital and served as health officer of the county for sixteen years. During World War I, Dr. O'Farrell entered the medical corps of the Army as a captain and served as a surgeon in the Fourteenth Cavalry. He was promoted to the rank of Major and was made Commander of the Camp Del Rio Hospital. He returned to inactive status after the war as lieutenant colonel in the medical officers reserve corps. He was a member of the Society of Military Surgeons.

Dr. O'Farrell was an accomplished surgeon although he did not limit his work to that field. He served on the active staffs of Memorial, Methodist and Jefferson Davis Hospitals, Houston, and was on the courtesy staff of Hermann Hospital, the Houston Negro Hospital and other Houston hospitals. He was a surgeon for the Santa Fe Railroad for forty-

five years. Dr. O'Farrell took an active part in all medical and public health affairs. He helped to organize and was a member of the first State Board of Health during the administration of Governor Campbell. He had an important part in framing the first public health code for Texas. He made notable contributions to the literature of public health early in his career. He was counted a public-minded citizen and leader in medical affairs, both in his county society and State Association. He was a member of the Baptist Church.

Dr. O'Farrell was married August 14, 1889 to Miss Rosa Daughtry of Richmond, Texas. He is survived by his wife; a son, Dr. J. D. O'Farrell, Houston dentist; a sister, Mrs. Tom Johnson, Magnolia; a brother, Vernon O'Farrell, Austin; and two grandchildren.

Dr. William Henry Parsons of San Antonio, Texas, died May 22, 1945, in a San Antonio hospital, of cerebral hemorrhage.

Dr. Parsons was born in Shady Grove, Kentucky in 1876, the son of Willoughby and Julia Parsons, who were tobacco dealers in that state. His preliminary education was received in Kentucky and his medical education in the Hospital College of Medicine, Louisville, from which he was graduated in 1906. He first located at Kosmosdale, Kentucky, where he was engaged in industrial practice. He later moved to Paducah, Kentucky, where he was located until 1921. He then moved to San Antonio, which was his home for the remainder of his professional life.

DR. W. H. PARSONS

During Dr. Parsons' residence in Kentucky, he was a member of the state medical association of that state, and while located in Paducah, he had served as both secretary and president of the local county medical society and as health officer of the city. During World War I, he served as a member of the draft board. After removing to San Antonio, Dr. Parsons had been a member continuously of the Bexar County Medical Society, State Medical Association and American Medical Association, despite the fact that he was compelled to retire from practice in 1932, following a coronary occlusion. Throughout his residence in San Antonio he took an active part in the civic, church and social life of that city. Following his retirement in 1932, he became a student of ancient history and the ancient practices of medicine on which he had written numerous articles. He maintained his interest in medicine and kept abreast of the latest scientific advances and of historical events. He was a member of the Baptist Church, which institution he had served as a deacon, and was a member of the Masonic order. He was a highly esteemed physician and citizen of San Antonio.

Dr. Parsons is survived by his wife, the former Miss Agnes Ramage, to whom he was married in Providence, Kentucky. He is also survived by two sons, Dr. W. B. Parsons, now serving in the armed forces, and Dr. John C. Parsons, San Antonio; and a daughter, Mrs. O. V. Luke, Austin.

Dr. Raleigh Sims Usry of Dallas, Texas, died May 31, 1945, in a Dallas hospital, of acute myocardial infarction.

Dr. Usry was born February 11, 1885, in Duke, Alabama, the son of James Adolphus and Martha (Wester) Usry. His academic education was received in the public schools of Bartlett, Texas, and the Grandview Collegiate Institute, from which he was graduated in 1906. His medical education was obtained in Baylor University College of Medicine from which he received an M. D. degree in 1915. After graduation he served an internship in Baylor University Hospital, Dallas. He had taken postgraduate work at Harvard Medical School and Bellvue Hospital, New York. He took special work in pediatrics in 1920, following which he limited his work to that specialty. He had lived and practiced continuously in Dallas since 1916, except for a period during World War I, when he served as a captain in the medical corps of the Army, with the Baylor Unit in France.

DR. R. S. USRY

Dr. Usry was throughout his professional life a member continuously of the Dallas County Medical Society, State Medical Association and American Medical Association. He was a member of the Dallas Pediatric Society and a founder member of the Texas Pediatric Society. He was a member of the North Texas District Medical Society, which organization he had served as secretary and treasurer for the past sixteen years. In April, 1944, he had retired temporarily from private practice to serve on the advisory board of the Veterans' Administration, and he was also acting medical director for the Union Fidelity Life Insurance Company, and medical director of the Dallas Y. M. C. A. He took an active part in the civic, church and cultural life of Dallas. He was a member of the Optimist Club, a Mason and a member of the Shrine. He was a member of the Baptist Church. Dr. Usry was held in the highest esteem by his medical associates and he had made notable contributions to Texas medicine through his work in the Texas Pediatric Society and particularly through his long service as secretary of the North Texas District Medical Society.

Dr. Usry was married May 24, 1917 to Miss Birdie Tucker of Dallas. He is survived by his wife, one son, Raleigh S. Usry, Jr., Dallas; three brothers, L. W. Usry, Dallas, H. S. Usry, Decatur, and Leslie Usry, Bartlett; and three sisters, Mrs. J. S. Hair, Irving, Mrs. R. S. Thompson, Dallas, and Mrs. Mack Gardner, Bartlett.

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[1]Deceased.

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

A Constructive Program for Medical Care is the most promising, if not the only prevention of the impending epidemic of socialized medicine—and socialized everything else, as for that. The American Medical Association has, through its Council on Medical Service and Public Relations, and the Board of Trustees, set up such a constructive program, and we are presenting the same herewith, on the next page, exactly as it was published in *The Journal of the American Medical Association* (July 21, 1945). It is our hope and prayer that each doctor in Texas will carefully read this very concise, direct and explanatory article. It certainly will give the doctors something to think about, and something to offer as a basis for any discussion of the problem of socialized medicine.

SEE NEXT PAGE

It is unfortunate, indeed, that the great medical profession has been jockeyed into a defensive position in this most important and far-reaching matter. It is said that the defensive never wins. It is only when the offensive is taken up that victory may be anticipated with any degree of confidence. Even under the offensive there must be intelligence, determination and the will to fight. There must also be ample material. There is no reason why the medical profession of this country, probably the most accomplished and successful body of doctors in the world, should not immediately change its defensive fighting to assaults all along the line. The fourteen points set up by the American Medical Association provides ample support for such a campaign.

What is really meant is that each of the fourteen points set out here, should be made a point of attack, somewhere in its front. We must have a militant medical profession, adequately trained, and of sufficient numbers to get results in its campaign of prevention and cure of disease. Therefore, we are asking that the government return to private practice any doctor who is not needed with the Armed Forces. We are asking that living conditions among our people be improved, and that public health activities be increased. We are insisting upon it that when people are sick they be hospitalized, and treated, all of which can be provided for conveniently and inexpensively through the use of voluntary sickness insurance plans, whether profit or non-profit, or what, just so they are reliable; and surely there are ways and means of determining efficiency and reliability. Private enterprise, whether profit or non-profit, is certain to be preferred in the extension of medical service, over any governmental direction that could be devised. And so on down the list.

The necessary strategy involves first the medical profession and then the public at large. Doctors must be able to tell their patients about it, and their friends, and the newspapers. That means that the doctors must themselves be well informed. This is one job that cannot be left to "George." Our Committee on Public Relations will do its part. Let's go!

CONSTRUCTIVE PROGRAM FOR MEDICAL CARE

AMERICAN MEDICAL ASSOCIATION

This platform was adopted by the Council on Medical Service and Public Relations and the Board of Trustees of the American Medical Association on June 22, 1945.

Preamble

The physicians of the United States are interested in extending to all people in all communities the best possible medical care. The Constitution of the United States, the Bill of Rights and the "American Way of Life" are diametrically opposed to regimentation or any form of totalitarianism. According to available evidence in surveys, most of the American people are not interested in testing in the United States experiments in medical care which have already failed in regimented countries.

The physicians of the United States, through the American Medical Association, have stressed repeatedly the necessity for extending to all corners of this great country the availability of aids for diagnosis and treatment, so that dependency will be minimized and independence will be stimulated. American private enterprise has won and is winning the greatest war in the world's history. Private enterprise and initiative manifested through research may conquer cancer, arthritis and other as yet unconquered scourges of humankind. Science, as history well demonstrates, prospers best when free and unshackled.

Program

The physicians represented by the American Medical Association propose the following constructive program for the extension of improved health and medical care to all the people:

1. Sustained production leading to better living conditions with improved housing, nutrition and sanitation which are fundamental to good health; we support progressive action toward achieving these objectives:

2. An extended program of disease prevention with the development or extension of organizations for public health service so that every part of our country will have such service, as rapidly as adequate personnel can be trained.

3. Increased hospitalization insurance on a voluntary basis.

4. The development in or extension to all localities of voluntary sickness insurance plans and provision for the extension of these plans to the needy under the principles already established by the American Medical Association.

5. The provision of hospitalization and medical care to the indigent by local authorities under voluntary hospital and sickness insurance plans.

6. A survey of each state by qualified individuals and agencies to establish the need for additional medical care.

7. Federal aid to states where definite need is demonstrated, to be administered by the proper local agencies of the states involved with the help and advice of the medical profession.

8. Extension of information on these plans to all the people with recognition that such voluntary programs need not involve increased taxation.

9. A continuous survey of all voluntary plans for hospitalization and illness to determine their adequacy in meeting needs and maintaining continuous improvement in quality of medical service.

10. Discharge of physicians from the armed services as rapidly as is consistent with the war effort in order to facilitate redistribution and relocation of physicians in areas needing physicians.

11. Increased availability of medical education to young men and women to provide a greater number of physicians for rural areas.

12. Postponement of consideration of revolutionary changes while 60,000 medical men are in the service voluntarily and while 12,000,000 men and women are in uniform to preserve the American democratic system of government.

13. Adoption of federal legislation to provide for adjustments in draft regulation which will permit students to prepare for and continue the study of medicine.

14. Study of postwar medical personnel requirements with special reference to the needs of the veterans' hospitals, the regular army, navy and United States Public Health Service.

Texas Newspapers and the 1945 Version of the Wagner-Murray-Dingell-Bill.—The medical profession has long known that without the aid of an informed public they could not hope to block the efforts of powerful minorities to bring about the socialization of medicine in the United States. We are indeed fortunate that we have a free press, managed and edited by public spirited Americans who are not easily misled by clever propaganda.

Very recently managing editors of Texas newspapers were furnished an official statement from Dr. H. F. Connally of Waco, President of The State Medical Association of Texas, expressing the Association's opposition to the Wagner-Murray-Dingell bill pending in Congress, and giving briefly the reasons therefor. This statement was given the widest publicity throughout Texas, and a number of papers carried also splendid informative editorial discussions of the subject. We quote herewith excerpts from a few of these editorials, as indicating the opinions of informed laymen on the effect the W-M-D bill, if enacted into law, would have on medical care in the United States.

The Kemp *News* is particularly explicit in its editorial opinion of the bill. It says, in part:

"This piece of legislation is just about the most damnable any of the boys at Washington has yet dreamed up and it is high time that every one opposing such a measure write your congressman and senator today. The bill by taxation would raise the sum of $3,142,000,000 and you would have to take any quack doctor that the government sent to wait on you and if you have a thimble full of brains you would know that calling a doctor paid by the federal government that you would be dead and in L before he cut enough red tape to call. The doctors don't want such a law enacted, the taxpayers don't want it, and if the people don't call a halt to the fool laws that are being passed at Washington, the next thing you know they will be telling us where we shall go after we pass from this vale of tears to enter another world. Write Sam Rayburn today and tell him to oppose such bills."

The Munday *Times* reveals discriminating understanding of the subject and pleads for voluntary prepayment programs of hospital and medical care, upholding American tradition of free enterprise and initiative as opposed to wasteful, bureaucratic regimentation. Its discussion follows:

"It is interesting to note that most of the talk and agitation about so-called state medicine and socialized medicine, comes from sources that seek to curry public favor, and too often votes. The people are led to believe that they will get something for nothing under government control and subsidized medical and hospital plans.

"The movement so vitally affects all the people, and it is so important that all individuals have proper medical attention, that the principals involved in plans to socialize medicine are apt to be overlooked. Fortunately, there has been resistance to the socializing process for medicine because of the well-grounded fear, born of experience, that under bureaucratic control, mediocrity is promoted as individual initiative is stifled.

"If the forces that seek to put government into the medical business, would, instead, help the medical profession perfect plans by which industries and individuals would be covered by voluntary programs for prepayment of medical and hospital bills on a monthly basis, they would be upholding the American tradition of private initiative, saving the taxpayers countless millions of dollars, and what is more important, they would be encouraging rather than discouraging the expansion of medical service on a more sound basis than in any other manner.

"Fortunately, the medical profession, industries and individuals have already worked out prepayment plans under which millions of people are now being cared for and millions more are being added as rapidly as they understand the advantages of such a system. They are acting as free citizens on a voluntary basis, and not under state compulsion with a new and arbitrary tax assessed against them whether or not they so desire it."

The Greenville *Banner* has not been misled by the specious arguments and propaganda for the W-M-D bill. It states, in part, as follows:

"Now, it would be fine if we could all report to doctors of our choice when we become ill; if we could have ourselves thoroughly examined, x-rayed and prescribed for and go away with the feeling that Uncle Sam is paying the bills. But that is not the way Mr. Wagner's bill would work; we would be lucky if the doctor who treated us should happen to be the one we wanted, and even with that satisfaction there would still be the knowledge that the medical services we received were paid for out of our own pockets.

"Mr. Wagner's bill would levy a direct tax of 8 per cent on all wages and salaries of all workers in private employment up to $3,600 of annual earnings and a direct tax of 5 per cent on the earnings of all self-employed people up to $3,600 per year. Approximately $3,142,000,000 of the total fund would be earmarked to provide Personal Health Services.

"Thinking American people will not want this bill enacted into law. Millions have provided for

their own health protection through insurance with private carriers. And these carriers do not tell them when to go to a doctor and to whom. And there's no 8 per cent tax on their salaries involved, either."

Senator Wagner, in introducing the 1945 bill into the U. S. Senate, which bears his name with that of Senator Murray, insisted that the measure would not socialize medicine, and would not force people to use doctors other than of their own choices. The Madisonville *Meteor* disagrees with the Senator in the following statement from an editorial entitled "Compulsion is Not Freedom."

"When the government goes into business, that is socialism, so when the federal government establishes a system of insurance to which everyone must contribute, when it regulates the provisions of medical service through Washington headquarters, when it regulates fees that doctors are to receive when they participate in the system, when it regulates those who are to be consultants and when consultants are to be consulted, that is definitely socialized medicine. The doctors who are dissatisfied with the system can quit and turn their abilities to some other channel, but the people, once they are saddled with compulsory medical practices, are the losers, and they will definitely have to pay for sociliazed medicine even though they prefer a private doctor."

The Beaumont *Enterprise* of August 6, carries a particularly informative discussion of the Michigan plan of voluntary prepayment for hospital and medical service as by far more desirable for a national health program than that envisioned by the W-M-D bill. The following are excerpts from this unbiased, clear expression:

"The Michigan program would develop voluntary, non-profit pre-payment plans for spreading the benefits of hospitalization and proper medical care among the low-income groups of the population. The Wagner bill professes to have the same objective, but it would be a form of regimentation under the guise of conferring a public benefit. The quickest way for the American people to lose what is left of their liberties is to exchange them for government 'protection,' for which they, in one way or another, must pay the bill . . .

"Would it not be better to make greater and more intelligent efforts to provide for the medical care of the American people on a voluntary, local and democratic basis than to resort to a government "panacea," such as the Wagner bill proposes? The practice of turning to the federal government for a solution of problems that have always been solved heretofore by the people for themselves has already brought about federal control which even some persons who once clamored for it now deplore.

"No one denies that there should be a better system of protecting the public health than now exists. No one denies that large numbers of Americans are deprived of medical care and hospitalization because they lack the means to pay for it. But only a confirmed believer in state socialism will argue that the federal government alone can meet this responsibility. There is still enough private initiative in America to deal with any question that lies within the purview of local government or local, independent action."

The Pampa *News* expresses the same views, in quoting Dr. C. Rufus Rorem of the American Hospital Association, who calls attention to the ever-increasing coverage of the American people by non-profit Blue Cross health service plans. The *News* states editorially:

"Compulsory sickness and hospital insurance, as proposed in the Wagner-Murray-Dingell bill, should be avoided unless it is unmistakably clear the need cannot be met otherwise. America is just beginning to tap the resources of voluntary coöperative methods.

"The latest plea to continue voluntary methods rather than to venture into government regimentation comes from Dr. C. Rufus Rorem, of the American Hospital Association. Dr. Rorem directs the association's hospital-service plan commission. This coördinates the 84 non-profit Blue Cross health-service plans. Though the Blue Cross voluntary prepayment program is still quite young, it already has a membership of 18,000,000 persons in 43 states and seven Canadian provinces.

"Dr. Rorem disputes the wisdom of adopting the new government insurance schemes of the Wagner-Murray-Dingell bill. Pointing out a number of health factors apart from any government tax, he emphasizes, 'A majority vote or a campaign promise will not provide adequate hospital and medical care.' It is unfortunate that the shortcomings of the compulsory sickness-insurance system of Europe, which it is sought to transplant into the United States, are not better known in America. There would then be less enthusiasm for socialized medicine among some of the uninformed."

The rather extended quotations from the Texas press given here are for the purpose of showing that medicine is not alone in its fight to preserve the highest type of medical care offered anywhere in the world. It should be repeated and emphasized again and again that our opposition to federal bureaucratic control of medicine is directly in the interest of the people we serve. The medical profession might actually be better off financially, under socialized medicine, considered in the collective sense, but the satisfaction of medical service well rendered and adequately cared for patients, would be gone forever under such a system. The patient would be the real sufferer.

Now is the time, when Congressmen are on vacations at home, to discuss with them the demerits of the W-M-D bill. Let us not fail to take advantage of this opportunity.

Information Bulletin for Medical Officers.—The Bureau of Information of the American Medical Association has prepared a fully informative bulletin for medical officers who might want to know definitely about many matters pertaining either to the service or the postwar period. This bulletin is available to any medical officer, or former medical officer who may want it. All that need be done is to drop a card to the bureau, at 535 North Dearborn Street, Chicago 10, Illinois. The bulletin will be promptly forthcoming, and is well worthwhile.

There is in this bulletin a rather thorough, although of necessity condensed discussion of the "G. I. Bill of Rights," the educational facilities in civil institutions for discharged medical officers, including medical colleges, hospitals and the like, and suggestions for the reëstablishment of practice, which includes the use of the data of the Bureau of Information of the American Medical Association, which is rather extensive and definite. There are a couple of tables of information about reciprocity as between the states, and lists of officers of state boards of medical examiners, boards of examiners in the basic sciences, examining boards in medical specialties, and last, but not least, a bibliography of material of interest to the medical officer and the former medical officer.

The State Medical Association of Texas is coöperating to the extent feasible, in all activities pertaining to reconversion of the medical profession from military to civilian occupation. The service of Procurement and Assignment of Physicians for Texas is still maintained in the central office, and the data there will be useful in the problems of reconversion. However, an effort is being made to channel into the Association setup all problems which are essentially those of civilian practice. Procurement and Assignment has rendered a magnificent service, starting from scratch, and very few will ever know what it has meant in toil and tribulation, even criticism, to the large number of physicians who have patriotically devoted themselves to the cause. It is all the work of organized medicine, of course, but action has had to stem from the government, somewhere, some way. It is hoped that the intervention of the government will before long be a thing of the past, and that organized medicine may again take up its whole burden, including the problem of relocation.

We are not in a position to say at this time whether the army should by now be returning doctors to civilian practice in large numbers. There is a misconception as to the purpose of retaining certain medical officers in the service. Many of them are needed because of their adaptability to specialized service in the near future, while large numbers are needed as a reserve, much as money surplus in the bank. However, it might be possible to work out a system through which average doctors, doctors with heavy responsibilities at home, either financial or personal, and doctors needed for replacement in critical areas in civilian practice throughout the country, may be released. All of this is a matter of military responsibility, and nobody but the military can assume it.

There has been some misapprehension because of the assignment of medical officers to duty with the Veterans Administration. That matter has been satisfactorily explained, it seems, but even so, it is a fact that many doctors will be needed for repair and rehabilitation service in army and navy hospitals, long after the war has come to an end. The medical service in the Veterans Administration has been severely criticized of late, and criticized to some extent all along, but there is nothing that cannot be cured by proper classification, improvement of working conditions, and promise of security for the future, such as exists in the medical service of the armed forces at the present time, and in the United States Public Health Service. Perhaps all of that is in immediate prospect. Congress seems to be aroused about it, and may do something to cure the sore spot. It has long been conceded that "brick cannot be made without straw."

CURRENT EDITORIAL COMMENT*

Demerol.—There has been a never ending search for a drug which would relieve pain and at the same time not exhibit certain untoward effects which morphine possesses. Demerol meets some of these criteria in that it does possess analgesic, spasmolytic, and tranquillizing effects. Its analgesic power is midway between codeine and morphine. The ordinary dose is 100 to 150 milligrams, administered either by mouth, intramuscularly, or intravenously. Most clinical reports suggest that Demerol does not produce euphoria but some observers feel that the euphoria produced is as great as produced by morphine. Furthermore, Demerol in the hands of many, has proved to be a rather fickle drug in that it does not relieve pain in a given individual to the same extent each time that it is tried.

It does have the advantage over morphine in that respiration is not depressed. Furthermore, it possesses a relaxing effect on smooth muscles and the action is an atropine papaverine-like effect. Like morphine, Demerol potentiates the action of bartiturates and is potentiated by nitrous oxide.

Demerol seems to be a relatively useful analgesic but its action is apt to be capricious. Its spasmolytic effects on smooth muscles would appear to be beneficial. The fact that it does not depress respiration is important. However, it has the definite disadvantage in not being as effective as morphine against intractable pain and there is good evidence that it does cause habit formation. The in-

*This department of the JOURNAL presents editorial comments on current items pertaining to the science, art and practice of medicine, contributed by members of the State Medical Association and scientists closely associated with the medical profession of Texas. Invitation is hereby extended to any member of the State Medical Association of Texas to submit such discussions for this department. The discussions should not be more than 500 words in length.

troduction of Demerol should, as soon as the war permits, increase the search for analgesic drugs which are as successful as morphine against pain but which do not possess habit forming properties.

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Physiology and American Medicine.—The recent death on February 6, 1945, of Dr. William H. Howell, Emeritus Professor of Physiology at Johns Hopkins University Medical School, calls attention to the significance which physiology as a scientific venture has played in the development of modern American medicine. Dr. Howell was the pioneer professional physiologist in this country, in the sense that he was not primarily a physician, and did not have an earned M. D. degree. Born in 1860, he undertook graduate work at the Johns Hopkins University under Newell Martin and received his Ph. D. degree in 1884. He inaugurated professional physiological teaching at the University of Michigan in 1890 and two years later came under the influence of the great medical physiologist H. P. Bowditch, who had established the first physiological laboratory at Harvard Medical School in 1871. In 1893, Dr. Howell became Professor of Physiology at Johns Hopkins, assisting in the inauguration of the first full-time, high grade professional medical school in the United States. After long service as Dean, he assisted in the development of the School of Hygiene at the Johns Hopkins University and became its Director. He continued active physiological research until his death.

Throughout this long period Dr. Howell was a leader in developing physiology as a basis for the effective practice of medicine. In this he was a close collaborator with those other great American leaders in physiology, Professor A. J. Carlson of the University of Chicago, and Professor W. B. Cannon of Harvard. These three men trained practically all of the brilliant contributors to physiology in this country for a half century. These physiologists laid the pattern for medical thinking along functional lines and for emphasizing the significance of understanding physiological and biochemical processes in order to be successful in medical practice.

For centuries during the prior history of medicine, anatomy had been the scientific foundation for the profession. This, of course, is still essential, from the standpoint of the way in which the human body is made, or, to use the dramatic phrase of the great Andreas Vesalius (1514-1564) "of the fabric of the human body." All the early anatomists were physiologists, also. Gradually, however, emphasis has swung to the functional approach to our knowledge of the body, since it is becoming progressively less possible to demonstrate much that is new or significant from the structural standpoint. Accordingly, physiology has become increasingly important in effective medical practice.

Beginning with Harvey (1578-1657) physiology has been a scientific field well cultivated by the English. This tradition is part of our intellectual heritage. American physiology has always been closely affiliated with the practical affairs of medicine, from its beginning with the classic Army experiments on digestion conducted by William Beaumont (1785-1853). It was William Howell who prepared the first great modern American physiological text. This book has profoundly influenced the practical medical success of generations of American physicians. American physiology is now in a position of world leadership, as readily attested by its brilliant Nobel laureates. The importance of this scientific discipline in the practical affairs of medicine is evident from the phenomenal success of the current text significantly entitled "The Physiological Basis of Medical Practice."

Doctors now appreciate that functional restoration in illness is of prime importance. Structural repair is significant only insofar as it contributes to normal function. It is on this substantial basis that physiology will remain paramount in the medical sciences.

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INCIDENCE OF PERFORATED ULCER LOW

The total incidence of perforated ulcer, the most serious complication in this stomach condition, is substantially small, it is reported in *The Journal of the American Medical Association* for June 9. Only about 8 per cent or less of the ulcers, according to figures cited, perforate or penetrate the tissues. The figures cannot be considered definite, however, since the number is dependent on two variable factors, the activity of the ulcer and the period of time under consideration. The possibility of perforation can be reduced to a minimum by adequate treatment of the ulcer until healed, by continuation of an ulcer diet to prevent recurrence and by examination at regular intervals.

"SULFA" IN WOUNDS DISCONTINUED

The Army's accumulated experience in wound management does not justify the local use of any chemical agent in a wound as an anti-bacterial agent, according to the office of the Surgeon General. The local use of crystalline sulfonamides (sulfa powder) has therefore been discontinued except in the case of serious cavities where its use, while permissible under the direction of the surgeon, is not recommended. This subject is covered by War Department Circular No. 160 as amended by W. D. Circular No. 176, 1945. —S. G. O. News Notes, June 30, 1945.

PROSTATIC HYPERTROPHY OPERATIVE PROCEDURES FOR ITS RELIEF

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The general impression seems to be that the treatment of prostatic obstruction has been definitely settled in the minds of all urologists. That is far from true. Today our ideas are constantly changing. We are steadily striving to obtain more satisfactory results, to lessen mortality rates, decrease the hospitalization period, and to arrive at the most satisfactory method of treatment for the various types of prostatic obstruction. We are far from agreement on these methods. The term, prostatic obstruction, is wide in its scope, and when one refers to prostatic obstruction, one thinks primarily of the enlarged or hypertrophied prostate, commonly called the adenomatous prostate. This condition is responsible for the majority of obstructions at the bladder neck, but there are many cases of prostatic obstruction in which there is no adenoma or areas of gland hypertrophy. Among these may be mentioned contractures of the bladder neck, bars, general fibrosis of the prostate, cysts, carcinoma, sarcoma tuberculosis, infections and infestations, prostatitis, prostatic abscess, and prostatic calculi. This discussion will be limited to the treatment of the enlarged prostate resulting from benign adenomatous hyperplasia. There is general agreement concerning the treatment of all other forms of prostatic obstruction.

Normally, at the age of 20, the prostate weighs about 15 Gm., gradually increasing until the fiftieth year when it reaches its maximum normal weight of 20 Gm. At this time it undergoes a natural atrophy corresponding to the gradual decrease of functional demand. Unfortunately, this natural process does not take place in all cases, for about 30 per cent show pathological changes that may give rise to obstructive symptoms and are characterized by irregular nodular enlargement of one or more of the constituent lobes.

An understanding of the glands within the prostatic capsule will enable us to more rationally approach a discussion of the various methods of treatment to be applied to the enlarged prostate. The glands can be divided into three groups according to their length and distribution: (1) the urethral or mucosal glands, which are short and near the urethra; (2) the submucosal or suburethral glands, which are longer and more branching; (3) the postero-lateral group of true prostatic glands. It has been shown conclusively that adenomatous hypertrophy of the prostate usually occurs in the mucosal or submucosal group. When hypertrophy occurs, a sharp division is evident between the adenomatous and non-hypertrophied postero-lateral group of glands in the form of a capsule of fibromuscular tissue which has been produced by compression of tissue in the growth of the adenomatous lobule. Thus, adenomatous hypertrophy may originate from five sites: first, the two groups of submucosal glands on each side of the urethra; next, the median posterior group of submucosal glands; above them are the subcervical glands of Albarran, which lie immediately beneath the bladder neck; and finally the anterior group, which are normally few and lie in the anterior commissure. In the majority benign hypertrophy originates from more than one group of glands, the most common type being enlargement of the lateral and postero-medium group, forming a collar around the bladder neck. The glands of the trigone may be involved or a pedunculated median lobe may occur to complicate the picture. Occasionally bilateral lobe hypertrophy alone may produce obstruction, and rarely a simple pedunculated middle lobe may be the sole enlargement. The type of enlargement will to some extent influence the method of treatment.

During the past ten years a voluminous literature has accumulated as the result of the argument concerning the merits of the various types of operations employed for the relief of prostatic enlargement. To attempt to review this literature is obviously impossible. Today we have four operative procedures for the relief of prostatic obstruction. They are:

1. Transurethral resection.
2. One stage suprapubic prostatectomy.
3. Two stage suprapubic prostatectomy.
4. Perineal prostatectomy.

By careful selection of cases and judicious application of treatment we are able to report a mortality rate comparing favorably with that resulting from appendectomy, that is, about 3 per cent. In the future we will be concerned with methods whereby the morbidity may be reduced and better functional results obtained. To argue that one operation should be employed to the exclusion of all other procedures is obviously absurd and frequently an admission of inability to properly employ other methods. Our position is that every case must be considered individually.

Read before the Section on Surgery, State Medical Association of Texas, San Antonio, May 3, 1944.

The day has passed when a urologist could perfect himself in the technique of one particular method of prostatic removal, disregarding the value of all others. Every case should be evaluated carefully and transurethral, suprapubic, or perineal prostatectomy employed according to the conditions presented by each individual case. Without this no operator will ever be able to satisfy either himself or the majority of his patients.

The percentage of obstructions relieved by transurethral resection vary widely, depending on the skill and temperament of the individual operator, as well as the type of enlargement and general condition of the patient and the willingness of the operator to perform other types of operative procedures. Obviously, the surgeon performing hundreds of resections yearly is better prepared to tackle a larger percentage of hypertrophies than the urologist who performs fewer resections. It is my practice to limit resections to those patients with middle lobe enlargements, enlargements of the subcervical group of glands, and early hypertrophies. Those operators who maintain that all enlargements regardless of size can be handled successfully by resection must be prepared to accept a certain degree of morbidity in a large percentage of cases and a mortality rate equally as high or higher than that attained by operators doing all types of operations. Recently Young reported 200 cases in which patients had had one to three resections, many of these done by some of the best resectionists of the day. These patients had sufficient residual symptoms to cause them to seek further surgery for relief. Large masses of adenomatous tissue were removed perineally, thus affording complete relief from symptoms.

We cannot consider any operation for prostatic hypertrophy successful until all symptoms resulting therefrom have disappeared. Many of these patients are able to void satisfactorily but find that they have a persistent nocturia, painful and frequent urination by day, and many other bladder symptoms with which we are all familiar. These symptoms are the result of residual prostatic tissue; such tissue having its blood supply interfered with results in a sloughing mass closely approaching the tissue of a foreign body. For a number of years the theory was advanced that following a transurethral resection the remaining prostatic tissue would undergo atrophy. On this theory the so-called "prophylactic resection" came into vogue for a time. Not only does this adenomatous tissue fail to atrophy, but it maintains its normal rate of growth, eventually resulting in obstruction either partial or complete, depending on the span of life attained by the patient. It is on the basis of this well-known fact that many competent observers question the rationale of employing resection for the removal of any adenomatous hypertrophy originating from either suburethral group of glands. We feel that we are able to do a rather complete removal of all adenomatous tissue with the resectoscope, but actually few transurethral prostatectomies are accomplished. We are fully convinced that if an operation for the relief of prostatic hypertrophy is indicated, a complete enucleation of adenomatous tissue, either suprapubically or perineally, is a far more satisfactory operation giving better results, permanent in character with but a few days longer convalescence. We shall attempt to illustrate the points of this discussion by briefly summarizing a few typical cases.

CASE REPORTS

CASE 1.—F. F. B. was examined in the Clinic on December 21, 1942. His prostate was enlarged grade 4, chiefly lateral lobe hypertrophy. A two-stage prostatectomy was recommended. Because of certain influences he was examined elsewhere and was assured that a transurethral resection would be the operation of choice. On January 10, 1943, transurethral resection was done. The total period of hospitalization was one month. He was again examined in the Clinic on January 21, 1943, still complaining of a nocturia, four to six times, passing a small amount of urine each time. His urinary stream was satisfactory. The prostate was moderately enlarged per rectum. Cystoscopic examination disclosed a moderate amount of residual tissue just internal to the external sphincter.

This illustrates the patient with a satisfactory functional result but with a definite morbidity still present for which he is seeking relief. The total enucleation of such hypertrophies seems to us a much more rational procedure than resection.

CASE 2.—J. L. M., age 63, entered the hospital on January 16, 1938, in excellent physical condition. His prostate was enlarged grade 2, chiefly lateral lobe, with a moderate amount of middle lobe hypertrophy. Transurethral resection was done, removing 19.5 grams tissue. The patient was able to void satisfactorily, but recurrent attacks of hematuria continued. A second transurethral resection was done October, 1938; 12.8 grams of tissue were removed. A satisfactory functional result was obtained. He reentered the hospital in February, 1943, complaining of nocturia, four to six times, recurrent attacks of hematuria, frequency and burning. The prostate was enlarged grade 4; the urine showed a large amount of pus and blood. A two-stage prostatectomy was done which has been entirely satisfactory from the patient's standpoint.

This proves rather conclusively that prostatic tissue does not undergo atrophy following resection, but continues the process of hyperplasia at an unchanged rate. A satisfactory functional result may be obtained while many of the symptoms resulting from hypertrophy persist.

CASE 3.—L. D. M., age 63, was seen first in March, 1940, complaining of all the symptoms resulting from prostatic obstruction. The examination disclosed a rather severe hypertensive heart disease, blood pressure 240/150, prostate enlarged grade 3, both laterals and middle lobes. Because of poor general condition a transurethral resection was done, removing 22 grams tissue. His general condition improved; an excellent functional result was obtained; all symptoms disappeared. The patient was again seen in December, 1943, passing a good stream but complaining of a nocturia, six to eight times, which was again undermining his general health; blood pressure was 240/160. Per rectum his prostate was enlarged grade 4. Perineal prostatectomy was done; the patient was discharged at the end of twelve days in good condition. He was last seen a few days ago with excellent results.

These cases are not unusual, and every urologist can report similar instances of patients undergoing repeated resections. No one urologist has a monopoly on such experiences. Most of us are able to report patients who had so-called early hypertrophy several years ago, who underwent a resection to avoid an enucleation of the prostate at a later date, and who show up several years hence with an enormous hypertrophy.

From the years 1930 to 1935 practically all obstructions were operated transurethrally, and a prostatectomy was rare except in certain localities. Today prostatectomies are becoming increasingly common. Many operators are reluctant to attempt perineal prostatectomies, but today an ever increasing number of perineal operations are being performed. The work of Young in treating early carcinoma of the prostate by total prostatectomy has in no small measure encouraged urologists to familiarize themselves with the perineal approach. There are certain definite indications for suprapubic and perineal removal, and the choice of operation should not depend on the individual operator's preference for a certain type of operation. In general it may be said that patients in good condition, showing no upper urinary tract changes, should be operated on perineally or by a one-stage prostatectomy, depending upon the type of hypertrophy present. If the hypertrophy has resulted in intravesical protrusions, a suprapubic approach is advisable, though we have removed this type satisfactorily through the perineum, and many operators maintain that this approach is preferable. Cases requiring prolonged drainage before enuncleation are usually reserved for the suprapubic approach.

Some patients do not tolerate catheter drainage and are probably best suited for suprapubic prostatectomy. We have never felt quite safe in doing a one stage prostatectomy, because of the fact that we have no very definite way of predicting which patient will have a violent reaction from the lighting up of an old pyelonephritis. It is far better that he have this reaction following the first stage and sufficient time is allowed for this to subside before the removal of the hypertrophied gland. When we consider a large series of cases, the mortality rate is definitely less following two stage prostatectomies than can possibly be attained following one stage suprapubic prostatectomies. These reactions are seldom seen following perineal operations and are of a mild character when seen. Patients having a vesical diverticulum requiring resection should be reserved for the suprapubic approach, resecting the diverticulum at the time the first stage is done.

Those hypertrophies which encroach upon the urethra and vesical orifice which do not have a great degree of intravesical intrusion are ideally removed by the perineal route. There are certain very definite and undeniable advantages to the perineal approach. (1) The preliminary drainage can be shortened materially. This period need be no longer than that preceding transurethral resection. Many patients for whom we would have allowed a period of catheter drainage before resection have been operated without drainage or with but a brief period of drainage. (2) This approach is practically bloodless and is easily controlled if encountered. We are all too familiar with the excessive blood loss that occurs during the resection of a large adenomatous prostate. Accurate calculations of blood loss during resections have been compiled, and such loss is much greater than we think from a hurried glance at the basin of bloody irrigating media seen after we have finished a resection. (3) An accurate approximation of urethra and bladder neck can be accomplished perineally which cannot be done suprapubically. A large denuded area is not left to be covered by the regeneration of epithelium as is necessary in suprapubic or transurethral removal. (4) Perineal operations are accompanied by less shock and are much better tolerated than other operative procedures on the prostate gland. The time consumed is much less than that required to resect even a moderately enlarged gland. (5) The average period of hospitalization is about fourteen days, only slightly longer than that required for transurethral resection and much less than the shortest possible period following suprapubic removal. (6) Suspicious nodules on the posterior surface may be examined carefully, biopsy done, and total removal carried out if necessary. (7) Last, but not least from the standpoint of the patient, the hygienic factor is a very definite advantage. The urethra is anastomosed tightly over a urethral catheter, and the postoperative course is free from urinary drainage.

The patient's memory is free from the unpleasant thought of many days spent in a bed constantly soaked with urine. Many methods have been devised in recent years to make suprapubic prostatectomy a more pleasant procedure, but time will not allow us to discuss these many improvements.

CONCLUSION

The urologist has at his disposal four operative procedures for the relief of prostatic hypertrophy, each operation having very definite and valuable merits. Only by the careful study of each individual case and the application of the operative procedure best suited for the relief of that particular type of enlargement will we be able to further reduce the already low mortality rate following prostatectomy, to lessen the morbidity, and obtain more nearly perfect results. The urologist should no longer be guided by his ability to perform a certain type of operation but should be guided in his choice of operative procedure by the findings in each individual case.

FACTS AND FIGURES ON CANCER OF THE CERVIX AND ENDOMETRIUM AND THE INCIDENCE OF THESE DISEASES IN A METROPOLITAN CITY OF TEXAS

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It has frequently been stated that cancer of the cervix and endometrium are curable. This is a rather bold assertion, and appears quite paradoxical when we realize that annually in this country 26 out of every 100,000 population die from these diseases. It must mean then that either one of two conditions prevails; that the statement in itself is not correct or that, if it is correct, someone is at fault if twenty or thirty thousand women needlessly perish each year from these conditions.

Let us examine some of the facts and figures relating to cancer, with particular reference to cancer of the female genital tract.

The United States Public Health Service in a recent report[5] states that out of every 100,000 white persons living in cities in the United States, about 430 are under treatment for cancer or have previously been treated for cancer, and that about 230 new cases of cancer are diagnosed each year per 100,000 of white urban population. Approximately 160,000 cancer deaths occur yearly in the United States.

How many of these cases involve the female? The incidence rate of cancer in the white female is about 12 per cent greater than in the white male, and in the colored female the incidence rate is 70 per cent greater than in the colored male. Therefore, considerably more than 50 per cent of the total cases of cancer developing and under treatment in this country involves the female patient.

What portion of female cancer involves the genital tract? The U. S. Public Health Service states[8] that the genital organs are attacked most frequently among women, whereas the digestive system is the site most frequently involved in the male. Out of 100 white women who develop cancer, 51 per cent will have cancer of the genital organs, including the breast, and 23 per cent will have cancer of the digestive system. This is in contrast to the white male, since only 12 per cent of males will have cancer of the genital organs, while 36 per cent will have cancer of the digestive system and 17 per cent will have cancer of the skin.

Of the 51 women out of 100 having cancer involving the genital organs 26 will have cancer of the breast, and 23 will have cancer of the cervix and fundus.

There are 53.5 new cases of cancer of the uterus and cervix per 100,000 population found each year in the United States, and 93.1 cases per 100,000 under treatment at any time during the year.[6]

The rate for cancer of the cervix and uterus is 63 per cent higher for the negro female than for the white female. This is thought to be due to the higher percentage of untreated cervical lacerations resulting from inadequate postpartum care.

In the Southern States the incidence of new cases of all types of cancer is almost 50 per cent higher than in the North. However, the increased incidence of skin cancers in the South accounts for most of this increased rate rather than to any increase of genital cancer in the South over the North, although we do know that cancer of the genital and urinary systems of the white female, and also genital cancer of the white male, is higher in the Southern States than in the Northern States.

On the basis of all the statistics cited it is interesting to note that there are close to one-half million people under treatment for cancer in this country at any given time, and that approximately 300,000 new cases are found each year. These facts and figures relating to such a devastating disease are the more important when we realize that deaths from cancer in this country are exceeded only by deaths resulting from heart disease.

With a disease so prevalent and so deadly, are we safe in our assertion that cancer of

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the cervix and uterus is a curable condition? We do know that the female developing a malignancy of the cervix and uterus has the good fortune, if such it can be called, of having this disease in an accessible organ giving early objective signs, and where visual, manual and other relatively easy examinations can be made to diagnose the condition in its earliest stages. It is only by early diagnosis and treatment that we can prove our assertion that cancers of the cervix and endometrium are really curable.

Meigs[3] in a recent publication quoted Bigelow and Lombard as saying that in certain forms of cancer the chance of obtaining a cure decreases 4 per cent each week that treatment is delayed. He likewise quotes Todd's statement that in cancer of the cervix the chances for a cure decreases 3.34 per cent each week that treatment is delayed following the onset of abnormal bleeding. He states that out of every 100 women with cancer of the cervix only 11 reach the surgeon in the early or operative stage, that 29 are seen in the border-line, operable stage, and that 60 are totally inoperable when treatment begins. Meigs makes a statement, which I think is important, and one which I think should be emphasized here. It is that "the delay in seeking treatment, which is responsible for the majority of deaths from cervical cancer is a delay to which both the patient and physician contribute."

An educational campaign to acquaint the public with the facts on female genital cancer so that early diagnosis and treatment can be obtained, is a program to which the medical profession must actively and urgently lend its support. The responsibility is theirs, and the opportunity must not be delayed or minimized. I can think of no field in public health where the possibilities of rendering a more valuable service can be accomplished to do a greater good, than by informing a public whose knowledge on these subjects has been and is still wrapped up in superstition, folklore, and antiquated, obsolete misinformation.

Although medical literature in recent years has contained innumerable original papers and reports on female genital cancer, written by men who yearly see large numbers of such cases, and whose opinions and recommendations should carry some authority, it is surprising and regrettable that many practitioners know far too little about the diagnosis and treatment of cancer of the cervix and endometrium. This statement is substantiated by the fact that a large percentage of inoperable and incurable cancer cases presenting themselves have had prior medical treatment for this same condition consisting of nothing more than douches, so-called "tonics," heat treatments, hormone therapy, and other types of wholly inadequate care. Surprisingly enough, too, is the knowledge that many of these doctors did not thoroughly acquaint themselves with the true diagnosis by their failure to do a vaginal speculum examination and a bimanual examination of the pelvis. Then, too often, the diagnosis of cervical and endometrial carcinoma was made as a result of a postoperative pathological tissue report. These reports, frequently made many days after the patient had been submitted to surgery, usually for undiagnosed uterine bleeding, often show that the surgical procedures used were too conservative, and that carcinomatous tissue still remains in the pelvis. No greater plea can be made to the profession than, in addition to acquainting the public with the early signs and symptoms of genital cancer, that they too be more diligent and thorough in their examinations of the patient and the evaluation of those signs and symptoms, so that proper and adequate treatment can be rendered.

Treves, on the basis of a report made by MacFarlane, et al,[2] estimates that if the twenty-six million women over 20 years of age were examined for the first time one could expect to discover as many as 52,278 neoplasms, all of them probably early enough to effect a cure. Such a statement should be a challenge to the medical profession to render a bigger and better service in this field of endeavor where the rewards will be very great.

MacFarlane's report covered a 5-year period in which 9,111 periodic examinations were made on 545 women. In that time four early cervical cancers and one early cancer of the fundus were found, as well as 13 cancers in nine other organs of the body. Some of these cancers were not present on the initial examination but developed and were found at subsequent examinations. She likewise found 461 inflammatory lesions of the cervix, and noted in her series that the Schiller test was unreliable in detecting cancer of the cervix. She concludes that periodic pelvic examinations will bring to light the inflamed lesions of the cervix which may well be the predisposing factor to cervical cancer; and that cervical cancer can be detected in an early and curable stage by means of this periodic examination.

Morton[4] has stated that, at present, a patient with cervical cancer has a one to three chance of survival. He further breaks this down by asserting that in cases of stage 1 cancer a woman in good health who can stand the risk of surgery will survive nine out of

ten times, but in those women who are obese or poor surgical risks, the survival rate is three out of four. Patients with stage 2 cancer have a fifty-fifty chance, patients with stage 3 a chance of one out of four or five, and in stage 4 only two or three patients survive out of 100 cases.

What are the signs and symptoms of uterine and cervical cancer; and what are the facts that an observing doctor should constantly bear in mind when examining a woman with a pelvic complaint?

Irregular bleeding is usually the first symptom of cancer of the cervix and endometrium. It is estimated by some writers as being present in as many as 90 to 95 per cent of these patients.

Many gynecologists feel that the woman who has increased premenstrual bleeding is much more prone to develop carcinoma of the endometrium later because the hyperplastic premenstrual bleeding may develop into the metaplasia which precedes the development of malignancy. It is likewise felt by many that a late menopause lends itself to the development of malignancy of the endometrium. Novak[5] feels that one should be on the lookout and suspicious of the later development of endometrial cancer in those women who show hypertrophic endometritis in the menopausal years, or in those younger women who show a hypertrophied endometrium on repeated curettages. Of course it should not be forgotten that other conditions, such as a granulosa cell tumor or cyst adenofibroma of the ovary, will also produce hyperplasia of the endometrium in the post-climacteric woman. The too liberal and frequently unjustifiable use of the estrogens will likewise produce hyperplasia and occasionally bleeding. This feature may cause a good deal of confusion when estrogens are given to the postmenopausal patient, as it may be difficult to determine without some doubt whether the bleeding is due to hyperestrinism or an early malignancy.

Adenocarcinoma of the fundus is probably linked up with ovarian activity. Herrell stated that he has never found adenocarcinoma in a woman who had lost both ovaries. Neither did he find adenocarcinoma in women with senile or atrophic vaginitis. If this experience reflects the usual states, then it is logical to do not only a complete hysterectomy but also a bilateral salpingo-oophorectomy in all cases of adenocarcinoma of the fundus. The surgical procedure should be preceded or followed by an intensive course of deep roentgen therapy. This, I believe, has now become standard treatment in most recognized medical centers.

Although the presence of fibroids in a uterus does not predispose that patient to the later development of endometrial cancer, it is considered good practice when doing surgery in women over 40 years or past the childbearing period for this or other pelvic conditions, not to attempt to be conservative. A complete hysterectomy with bilateral salpingo-oophorectomy is usually advisable. Nothing is gained by leaving in the ovaries in any woman past the childbearing period; and, further, their removal produces no harm apart from the occasional symptoms of menopausal tension which can be adequately controlled with estrogens. Allowing them to remain in those cases in which the uterus has been removed only invites later cystic degeneration resulting from the disturbed blood supply, with the possibility of more surgery later; and allowing them to remain in those surgical cases showing estrogenic activity with hyperplasia in the menopausal patient may aid in the later development of endometrial malignancy. This is especially true if we consider that estrogenic activity in the menopausal patient has a carcinogenic effect on the endometrium. One must not feel either that if ovaries are allowed to remain, one can permanently destroy their function later by radiation. Ovaries have remarkable regenerative properties, and their function has been known to return years after x-ray or radium treatment. Therefore, the only sure way of eliminating all ovarian activity is by surgical castration.

In what type of endometria does malignancy develop? Randall[7] states that "adenocarcinoma can develop when the follicular activity has been modified by the development of a corpus luteum as well as when the endometrium has been subjected to continued estrogenic stimulation; in other words, it is not only in the anovulatory and hyperplastic endometria cases that carcinoma develops, but it can develop in any type of endometria." He likewise observes that adenocarcinoma does not develop in women showing loss of estrogen with atrophic endometria, and for that reason recommends radical surgery in patients past 40 years, with hypertrophic endometritis.

Various types of treatment have been and are still in vogue for cancer of the cervix. It cannot be said that the advantages and cures are limited to a certain type of radiation or a certain surgical procedure, or to a combination of surgery and radiation. Equally good reports have been given by operators using a variety of procedures. The procedure that has given the best results for the individual is probably the one that he feels is the best in his hands. Meigs has performed the Wertheim operation in a large series of cases,

with rather promising results. This operative procedure is, however, a rather formidable one, and in the hands of an inexperienced operator probably would not be very satisfactory. Smith and Pemberton confine their total hysterectomies for cancer of the cervix only to those cases which show very early non-invasive lesions. They treat the balance of the cases with radium and x-ray radiation. Morton,[4] in 1944, reported a 5-year-plus survival rate of 66.7 per cent of patients who received radium alone as against 66.6 per cent in those who received radiation in addition to radium in stage 1 cancer of the cervix. His stage 2 radium cases had a 25 per cent survival as against 46.1 per cent when combined with radiation. Stage 3 cases with radium alone had a 15.8 per cent survival, and with radiation added, 32.9 per cent. In stage 4 there were no survivals with radium, but 32.2 per cent when radium and x-ray were used. This gave a grand total of 15.2 per cent survival for all stages with radium only, but a survival of 32.2 per cent when radium and x-ray therapy was used. He concludes that about 90 per cent of all cases of cancer of the cervix can best be treated with radium and x-ray combined, and that x-ray should be used first, unless the lesion is extremely small.

During the year 1944 there were 192 cases of cancer of the cervix and 37 cases of cancer of the fundus admitted for treatment in five of the larger hospitals of Houston, Texas. These five hospitals represent a bed capacity of 1,478 out of the 1,798 total available beds in all the hospitals of Houston. The majority of those hospitals not included in this survey were hospitals in which female patients were not treated for gynecological diseases.

The 192 cases of cancer of the cervix and 37 cases of cancer of the endometrium, constituting a total of 229 cases, give an incidence of 48.2 cases per 100,000 population. This figure is slightly lower than the 53.5 cases per 100,000 population quoted by the U. S. Public Health Service for other representative cities of the United States.

The age incidence of the 192 cases of cancer of the cervix in the Houston series are compared in table 1 with Koblanck's series of 6,071 cases.

TABLE 1.—*Age Incidence in Cervical Cancer.*

Age	Houston Series Cases	Houston Series Per Cent	Koblanck's Series (6,071 Cases) Per Cent
20-30	8	4.2	3.6
30-40	40	20.8	24.
40-50	49	25.5	33.7
50-60	51	26.6	24.
60-70	30	15.6	8.7
70+	14	7.3	3.5
(1 patient 87)			

The presenting symptoms on admission for the cases of cervical cancer in the Houston series are given in table 2.

TABLE 2.—*Presenting Symptoms on Admission in Cases of Cervical Cancer.*

Symptoms	Cases
Menorrhagia	22
Metrorrhagia	34
Post-menopausal bleeding	64
Pelvic pain	8
Backache	9
Abdominal pain	12
Hip pain	4
Loss of weight	3
Abdominal mass	1
Foul leukorrheal discharge	11
Weakness	2
Vomiting	2
Swelling of leg	1
Contact bleeding	5
Urinary obstruction	1
Urinary incontinence	1
Rectal bleeding	1
Rectal pain	1
Vaginal bleeding following supracervical hysterectomy	1

The age incidence in the 37 cases of cancer of the endometrium are given in table 3.

TABLE 3.—*Age Incidence in Thirty-Seven Cases of Cancer of the Endometrium.*

Age	Cases	Per Cent
20-30	1	2.7
30-40	10	27.0
40-50	8	21.6
50-60	9	24.3
60-70	9	24.3
70 and over	0	0

The presenting symptoms on admission in the cases of cancer of the endometrium are given in table 4.

TABLE 4.—*Presenting Symptoms in Cases of Cancer of the Endometrium.*

Symptoms	Cases
Menorrhagia	9
Metrorrhagia	5
Post-menopausal bleeding	18
Pelvic pain	1
Abdominal pain	3
Backache	3
Hip pain	2
Loss of weight	1
Urinary incontinence	1
Severe constipation	1

From the figures given in the accompanying tables it will be seen that cancer of the cervix and fundus are diseases of the middle decades of life, although no woman beyond the age of 20 years is immune. A study of the presenting symptoms reflects only too well the fact that the majority of patients were admitted with symptoms indicating that the disease was already far advanced, and at the time of hospital admission showed evidence of metastasis and obstruction, cachexia and pressure. The physical examination and operative findings revealed that the largest percentage of cases were in stage 3 and stage 4, where the expectation of a cure was extremely small.

A further review of the hospital charts disclosed a great variation in the methods of treatment. Supracervical hysterectomies

were done for several carcinomas of the cervix, total hysterectomies for a few advanced cancers of the cervix, and vaginal hysterectomy for one. The carcinomas of the fundus likewise were treated by a variety of operative procedures. Several patients had supracervical hysterectomies, and a large number had total hysterectomies, with one or both ovaries left unremoved. Two patients had vaginal hysterectomies without having the adnexal organs removed.

The type and dosage of radium therapy for these cases varied considerably with each radiologist, and frequently appeared inadequate on the basis of recognized present-day therapy dosage. The type and dosage of roentgen irradiation could not be determined from a review of the hospital charts.

On the whole, these charts emphasized the need for physicians being better trained and more diligent in the early diagnosis of these diseases, and better acquainted with the recognized standard methods of treatment.

The control of such a devastating disease can be had only by the concerted efforts of the medical profession as a whole. The successes obtainable can be augmented by adhering to the following simple suggestions in the management of women patients:

1. Periodic pelvic examinations should be done at least twice a year in married women over 20 years, and in all women over 30 years.
2. Biopsies of suspicious cervical lesions should be secured for microscopic examination.
3. Diagnostic curettage should be done for any unexplained abnormal uterine bleeding.
4. Caution should be exercised in the use of endocrine therapy in suspected so-called functional bleeding cases, remembering that the use of hormones may cause delay in the treatment of bleeding caused by carcinoma of the cervix or endometrium.
5. Adequate treatment must be given for malignancy of the cervix and endometrium by the accepted methods, utilizing radiation and/or surgery.
6. The laity and the profession must be taught that cancer of the uterus is curable in its early stages; that time is an important factor in its cure; that hormones do not cure all gynecological disorders; that menstrual irregularities during the menopausal years are not normal; that irregular vaginal bleeding of any kind at any age may be a danger signal and indicative of early carcinomatous changes; that unexplained or unaccounted for menorrhagia, metrorrhagia and post menopausal bleeding can be caused by cancer and is not always a result of endocrine deficiency, cystic ovaries or fibroids; that leukorrheal discharges in adult women may be an early sign of malignancy; that eroded and infected cervices may be forerunners of cancer.

With these suggestions in mind there can be no doubt but that cancer of the uterus and cervix will be detected at a much earlier date and in ample time in most instances, to bear out the assertion that "cancer of the cervix and endometrium is curable."

REFERENCES

1. Crossen and Crossen: Diseases of Women, Ninth edition, p. 521, Mosby, 1941.
2. MacFarlane et al: The Value of Periodic Pelvic Examination, J. A. M. A., 126:877 (Dec. 2) 1944.
3. Meigs et al: Value of Vagina Smear in Diagnosis of Uterine Cancer, Surg., Gynec. & Obst., 77:449 (Nov.) 1943.
4. Morton, D. G.: Carcinoma of Uterine Cervix; Treatment and Prognosis, West. J. Surg., 52:1 (Jan.) 1944.
5. Novak, E. and Yui, E.: Relation of Endometrial Hyperplasia to Adenocarcinoma of Uterus, Am. J. Obst. & Gynec., 32: 674 (Oct.) 1936.
6. Personal Communication: U. S. Public Health Service (Jan.) 1945.
7. Randall, C. L.: Recognition and Management of the Women Predisposed to Uterine Adenocarcinoma, J. A. M. A., 127:20 (Jan. 6) 1945.
8. U. S. Public Health Service: Illness From Cancer in the U. S., Reprint 2537:7 (Jan.) 1944.

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ABSTRACT OF DISCUSSION

Dr. Allen L. McMurrey, Houston: I first wish to stress the importance of Dr. Hannon's contribution to this thread-worn but more recently revived medical subject of carcinoma of the cervix and endometrium. I say this because, first, there has been so much in the press of late with reference to cancer research in Houston and its vicinity; and, secondly, there has been a definite trend of late to change from radium and x-ray irradiation alone to attacking this terrible malady in its early stage by surgery in a few selected cases. Dr. Joe Meigs of the Massachusetts General Hospital in Boston, has an article in the April issue of the *Gray Journal* entitled, "The Wertheim Operation for Carcinoma of the Cervix." The expert medical men, whether radiologists or surgeons, who have been seeing a considerable number of early carcinoma of the cervices in the young individuals, have been discouraged with the results in the early cases when irradiation therapy alone has been used. I, for one, have been selecting a few of these individuals with very early lesions where the lesions have been confined to the endocervical tissue and subjecting them to the Wertheim procedure, but I must confess with the greatest of temerity and trepidation.

This confession is brought forward only after reading Dr. Meigs' excellent article where he attacks this condition even in the stage 3 with the glands involved. The rationalism of surgery by his deductions, which I feel are correct, is that irradiation either by x-ray or radium is relatively ineffective in conditions where glands are involved. His results lead us to believe that in properly selected cases, we may improve our results in the treatment of carcinoma of the cervix by this procedure. In his experience, urethral complications were very frequent, but with judicial care, he feels these should be minimized. After hearing Meigs' report, Masson, Councilman, Vogt and Montgomery were willing to report their experiences. It was found that Masson and Councilman had done 113 Wertheim operations in the past ten years at the Mayo Clinic for similar conditions with approximately the same results.

My experience with one case of carcinoma of the

cervix led me to employ the Wertheim procedure in other such cases. This patient was seen in 1936 with symptoms of pain and tenderness in lower pelvis, profuse yellowish vaginal discharge and more recently vaginal bleeding. In this case, the pain, discharge and bleeding was the result of a very severe pelvic inflammatory disease and a suspicious area was found in the cervix by the Schiller test, which proved to be squamous cell carcinoma. The radiologist was consulted, and it was his opinion that no radium could be applied until the inflammatory process had subsided. The patient was given the usual palliative treatment for several weeks, after which a Wertheim hysterectomy was done. The specimen was turned over to the pathologist and serial sections were made from the cervix. No further evidence of cancer was found. In other words, this patient was cured of carcinoma by the simple process of superficial conization for biopsy. The patient was examined at frequent intervals following the operation and there was never any evidence of recurrence. The patient died November, 1944, from a cerebral accident, secondary to hypertension, and at postmortem no evidence of malignancy or metastasis was found.

Following this experience in 1936, there have been other sporadic cases in which the same procedure was followed, notwithstanding that many of these patients were in the twenties and early thirties where the prognosis is more grave. The case reported is the only one in which death occurred, and none of the other cases show any evidence of recurrence.

In recapitulation, I must stress that this procedure, in my opinion, is for very early carcinoma of the cervix and, furthermore, is not the procedure to be undertaken by the casual operator.

The modified Wertheim operation is not my treatment for carcinoma of the cervix as it is usually found, but it is the procedure to be followed in a few selected cases. In the average case, x-ray and radium are still the procedures of choice. The cases in which the modified Wertheim operation is indicated are sporadic but, nevertheless, definite. The operation is indicated in very young individuals, where the lesion is early and where the abolition of all ovarian tissue would be a tragedy.

Dr. Karl John Karnaky, Houston: Dr. Hannon is to be congratulated on his most excellent paper. I should like to add to his paper a report on the microscopic diagnosis during the past ten years at the Jefferson Davis Hospital. This report showed 709 cancer of the cervix and 44 adenocarcinomas of the uterus. In my opinion, the cervix is many times more important than the uterus. I will venture to say that the patients in all of the 709 cases of cancer of the cervix will be dead in five years. The majority of these cases could have been prevented by cauterization, coagulation of the cervix. In the past ten years at the Jefferson Davis Hospital, we have done over 5,000 conizations, and as far as our records show, we have not had one carcinoma of the cervix in this group. The cervix is the "killer," so let's pay more attention to it than the uterus and we will do fewer hysterectomies. Also 4 of the 44 patients with adenocarcinoma of the cervix died in the series.

Personally, I have seen only about 3 cases in which death was caused by carcinoma of the uterus, yet some operators rush in and remove the uterus because of too many minor things.

If we would concentrate on keeping all cervices free of ulceration and ectropion, we would be doing more good than removing a large series of uteri.

Also, I should like to emphasize that there are some doctors who are giving stilbestrol for uterine bleeding at or after the menopause and are not studying the case any further. This is very poor medicine and is to be condemned.

TREATMENT OF CARCINOMA OF THE CERVIX BASED UPON CLINICAL AND CELLULAR CLASSIFICATION

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GALVESTON, TEXAS

There were over 164,000 cancer deaths in the United States last year. In women, carcinoma of the breast and uterus occur with almost equal frequency. Eighty per cent of all uterine malignancies occur in the cervix. Over 13,000 deaths were recorded last year from cervical carcinoma. This death rate for uterine malignancies can materially be decreased with the proper utilization of known proven therapy. The survival rates in most clinics have remained the same for twenty-five years. By carefully evaluating and planning the treatment of each individual case, the survival rates will be greatly increased. Such treatment can only be given by a well organized group who are trained in clinical and operative gynecology, pathology, radiology, and with trained personnel to follow each case and record results. There must be sufficient radium, and adequate x-ray facilities available to the group.

In order to properly evaluate results in comparison with others, we must have some common means of classification. Such a classification must not only be based upon cellular morphology, but also upon the extent of invasion of the malignant cells. Broders's classification on the basis of cellular morphology is most generally used by pathologists. However, in squamous cell carcinoma of the cervix, Martzloff's cell classification is an excellent one. Martzloff's and Broders's classifications are given in table 1.

TABLE 1.—*Classification on the Basis of Cellular Morphology for Squamous Cell Carcinoma of the Cervix.*

MARTZLOFF	BRODERS'S
I. Spindle cell type, containing chiefly cells that resemble the external layer of cells found in the normal cervical epithelium.	I. 0-25% Undifferentiation 100-75% Mature cells Least malignant and least radio-sensitive.
II. Transitional cell type, containing chiefly cells that resemble the middle or transitional layer of the normal cervical epithelium.	II. 26-50% Undifferentiation 75-50% Mature cells
III. Spindle or basal cell type, containing chiefly cells that resemble the basal cell layer or stratum germinativum in the normal cervical epithelium.	III. 51-75% Undifferentiation 49-75% Mature cells Intermediate malignant and Intermediate radio-sensitive.
	IV. 76-100% Undifferentiation Most malignant and most radio-sensitive.

Far too often, the prognosis and treatment is based upon the cell classification alone. It is impossible to determine one's results with only this information.

We must have a classification on the basis of the extent of invasion, growth, or metas-

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tases of the malignant cells. The Radiological Sub-commission of the Cancer Commission of the League of Nations adopted such a classification in 1928; it was further clarified in 1938. Because, perhaps, of its international recommendation, it has become more or less universally accepted. This classification places too much emphasis on the late and hopeless case, and offers no classification or subdivision for the early cases which

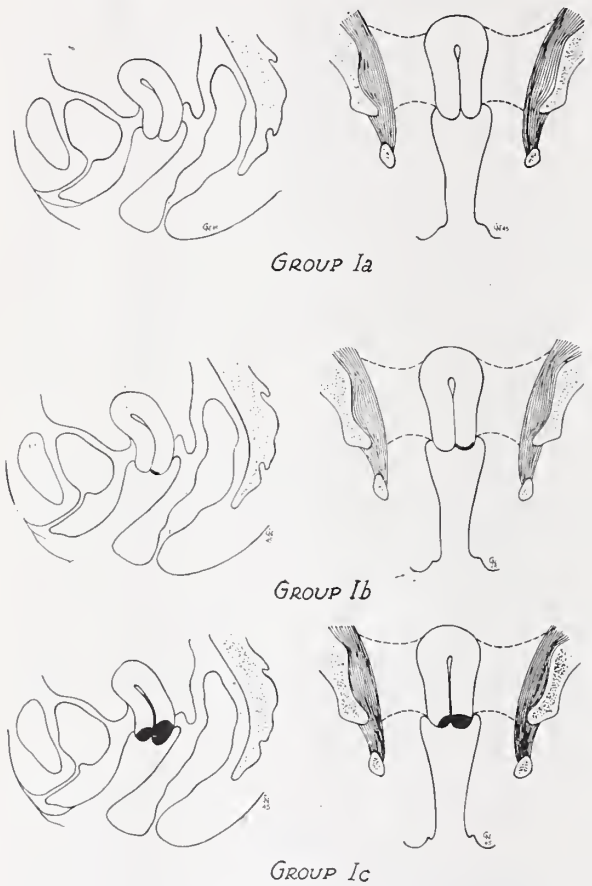

FIG. 1. Schematic drawings, sagittal and cross-section, showing anatomical relationship of vagina, uterine cervix and body, and pelvis in connection with the clinical classification of carcinoma of the cervix (Table 2).

GROUP 1*a*. Cases in which there are microscopic lesions or surface changes only, clinically unrecognizable and commonly designated "precancerous" or "suspicious" by the pathologist.

GROUP 1*b*. Cases in which lesions are macroscopic or clinically recognizable, but only surface in character.

GROUP 1*c*. Cases in which carcinoma is entirely limited to the cervix.

are more amenable to treatment. We have subdivided their classification; there are other such subdivisions, namely, Miller and Schmitz, which are given in table 2.

Too many cases, when diagnosed, are so advanced that they fall into the latter groups.

Time and space at this time will not permit an explanation and recommendation for improvement of this fact. One thing should be mentioned, however, which is that vaginal bleeding may be a very late symptom of cervical cancer. We have found some surprisingly early cases, since we established the rule that if a cervix requires treatment, it deserves a biopsy. This is a simple, rapid, inexpensive, office procedure, which produces no harm and little discomfort to the normal patient.

If a suspicious case is seen and the diagnosis of cancer is made, the treatment should be instituted immediately. There is an estimated decrease of 16 per cent in the survival rate, for every month of delay in treatment of the early highly malignant cases. Therefore, every effort should be made to make

TABLE 2.—*Clinical Classification of Carcinoma of the Cervix.*

Group		League Nats.	Miller	Schmitz
Ia.	Microscopic lesions; some cases only surface changes, clinically not recognized, "precancerous," or "suspicious" is the terms so often used by the pathologist.	I	I	I
Ib.	Macroscopic recognizable, but only surface involved.	I	I	I
Ic.	Cancer entirely limited to the cervix.	I	II	II
II.	The carcinoma has infiltrated the parametrium on one or both sides; the upper two-thirds of the vagina or a portion of this area; if an inverting type of growth, the body of the uterus may be invaded.	II	III	III
III.	Infiltration has invaded the pelvic wall on one or both sides; on rectal examination there is no free space between the tumor mass and the pelvic wall. Frozen pelvis. All of vagina may be involved.	III	IV	III
IV.	The carcinoma involves the bladder, or rectum. Fistulae may be present. It may have spread outside the true pelvis, above the pelvis, below the introitus; distant metastases may have occurred.	IV	IVa b c	IV

the diagnosis early, and begin treatment at once.

Planning the treatment and making the prognosis requires accurate knowledge of the (1) clinical classification, (2) cell classification, (3) age of the patient, (4) general state of health, with particular reference being given to cardiovascular-renal systems and gastro-intestinal system, (5) proximity of childbirth, (6) size and obesity of the patient, (7) the presence and extension of pelvic inflammatory changes, and (8) adhesions of bowel to adjacent structures. Of course, other disease entities are given adequate consideration. Also, the resistance the patient may or may not have to the malignancy is not to be forgotten.

With this information, it is not possible to outline specifically the full course of treatment, except in the very early cases. For instance, if irradiation is to be used, it is impossible, without careful follow-up, to determine how the patient will tolerate it, and how

the cells will respond. Therefore, the practice of referring the patient to a radiologist with a cell classification in one hand, and her death certificate in the other, has been a very important factor in allowing our statistics to remain the same for the past twenty-five years. It is easy, even for those of us who are young and courageous, to see why these patients are so referred, and forgotten, until a fresh grave is noted in the cemetery. But sooner or later, this will happen to someone near and dear to us, because one out of every eight women who live past forty years of age is dying of cancer.

There are three proven methods of therapy: (1) x-radiation, (2) radium radiation, (3) operative, and a combination of any two or all three. Unfortunately, it has been almost universally accepted to use only irradiation by x-ray and radium, regardless of the clinical and cell classification, the size of the patient, and most important, the sensitivity of the cells to such therapy.

If the cell classification is low, Broders's I, Martzloff's I, or spindle cell in squamous cell carcinoma in early cases, Groups Ia, Ib, and Ic, metastases will have occurred in no more than 6.5 per cent. This cell grade is relatively radio resistant; therefore, a radical panhystero-bilateral salpingo-oophorectomy, with removal of the upper one-third of the vagina, is the procedure of choice.

Following this operation, the use of irradiation on the hypogastric, external iliac and presacral lymph nodes may be employed. We do not object to this, provided the bladder and rectum are protected, either by a lead shield, or directing the rays away from the central structures. However, we feel it is not necessary and in many cases is detrimental.

If the cell classification is Broders's II, or Martzloff's transitional, and the clinical classification is Group Ia or Ib, the same procedure as described above may be used.

If the cell classification is Broders's III or IV, or Martzloff's spindle or basal cell, then only in clinical Group Ia would we employ operative procedure alone.

The rationale for such therapy is explained by the fact that in clinical Group Ic, with the cervix only involved, metastases will have occurred in 30 per cent of cases in cell grade II, and in nearly 40 per cent of cases in cell grade III or IV. These more malignant cells are more sensitive, as a rule, to irradiation; therefore, a combination of x-ray, radium, and operative procedures are employed in these cases of clinical Groups Ib and Ic.

In all cases in which the cells have invaded the tissues beyond the cervix, that is from Group II on, irradiation by x-ray and radium is the procedure of choice. Again may I advise the necessity of careful follow-up, during the course of the therapy. When we first see the patient, we may clinically classify her in Group III or IV; but following some x-radiation, the inflammatory changes in tissues may disappear, and what was once thought to be an extensive growth, may have been only induration from inflammatory changes. Such findings, of course, allow us to change our patient to a lower clinical group

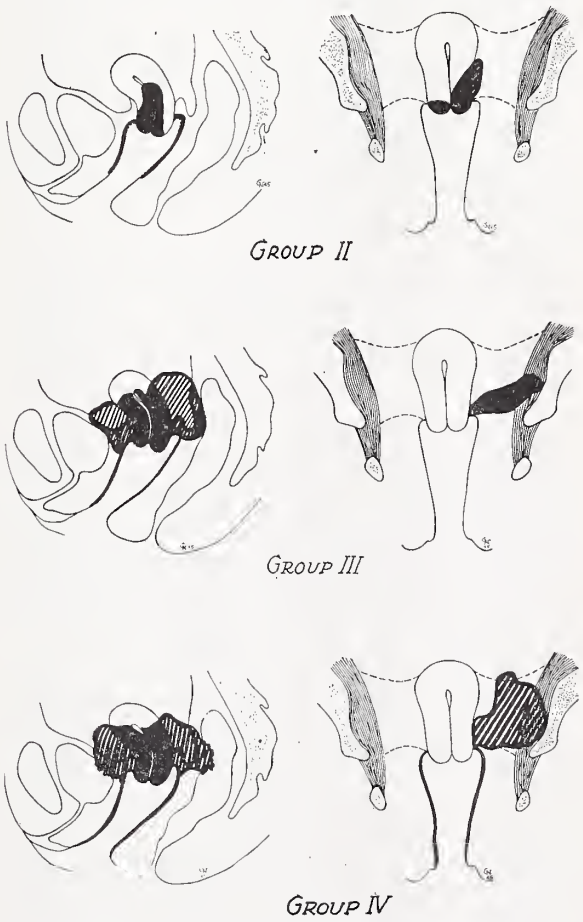

FIG. 2. Diagrammatic drawings, sagittal and cross-section, indicating extent of involvement in cases of carcinoma of the cervix, in connection with clinical classification (Table 2).

GROUP II. Cases in which the carcinoma has infiltrated the paremetrium on one or both sides; the upper two-thirds of the vagina or a portion of this area. The uterine body may be invaded if the carcinoma is of the inverting type.

GROUP III. Cases in which carcinoma has invaded the pelvic wall on one or both sides. All of the vagina may be involved.

GROUP IV. Cases in which carcinoma has involved the bladder or rectum. The growth may have spread outside the true pelvis, above the pelvis or below the introitis; distant metastases may have occurred.

which may change the whole course of her therapy.

In the presence of infection, it is better to use x-radiation prior to radium, unless one has one or two grams of radium, and can expose the tissue to heavy doses at short intervals and very short duration of time at each exposure, and is able to clear up the infection

by local applications in the form of sulfonamide, antiseptics, or penicillin. The other indication for x-ray, prior to radium, is the effect of x-rays in sealing off some of the lymphatics and blood vessels, so that instrumentation may not accelerate the metastases. Following the use of x-ray, there is a decrease in the size of the lesion. This is an important fact in more advanced cases, because it gives a smaller area to radiate with the radium, which has an effective range of no more than 3.5 cm.

How much x-radiation the patient should have is determined by the roentgenologist, the type of machine he has, the tolerance of the skin, the obesity or size of the patient, and so forth; but how he directs the rays is of marked importance, if one plans any operative procedure later.

As to the amount of radium necessary for adequate treatment, two grams would be most desirable; a minimum of 150 mg. is necessary. It is absolutely necessary that adequate dosage be given when the patient receives the first course of therapy. There is only one chance to arrest a case with irradiation. In other words, malignant cells at the original site of the lesion will respond only once to such therapy. If enough irradiation is not given during the few weeks of the initial treatment to destroy the cells, or so destroy the blood supply to the area so that they will not survive, any course of treatment given at a later date will only be palliative.

The type of growth, whether inverting or everting, determines what type of applicator shall be employed. For instance, if an everting or cauliflower type of growth is present the mushroom type of applicator is chosen; if it is an inverting type of growth, the straight capsule in the canal is selected. This most simple method has proven to be just as effective as the more complicated methods, such as needling, various types of bombs, and so forth. These complex devices are rapidly being discarded even by the clinicians who devised them, as well as by those who carefully follow their cases and record their results. The radium should be properly placed in the cervix. Many times because of haste, friability of tissues, or failure to find the external os, the capsule containing the radium is not placed in the cervical canal but anterior or posterior to the cervix, with the result of a burn through the bladder or rectum, with the subsequent development of a fistula. If one cannot identify the external os after a brief exploration period, he should not attempt to place the capsule in the cervix, because the odds are that he will not have it in the canal.

The tissues should not be exposed to the radium for more than thirty-six hours at any single time, as further exposure injures normal tissue. One to two weeks may elapse before another exposure may be done. The amount of radium in terms of milligram hours, as determined by multiplying the milligrams of radium, by hours exposed, should not be less than 3500 mg. hours, and rarely over 6000, the average being 4800.

When patients have been treated with this amount, plus their tolerance to x-radiation, and there is a recurrence of the growth at the site of the lesion, or the neoplasm remains unchanged, when at all possible, one should do a radical operation. Too much emphasis cannot be placed upon the necessity for a well trained operator handling these cases; however, too much credit or criticism must not be given the operator for his success or failure, because the extent of the growth is the more important determining factor.

Use of the cautery is not sufficient therapy in early cases. Multiple block studies made upon tissues removed by operation, after so-called destructive cauterization, have shown the presence of living cancer cells in a high percentage of cases. Radical operation, as required for these cases, does not carry the high mortality rate it once did. This was the outstanding criticism, in the past, of the Wertheim operation. Now we realize the importance of properly preparing the patient for this radical procedure. With our present knowledge and materials to prevent and treat shock, and the use of sulfonamides and penicillin to treat infection, surely this radical operation can become a relatively safe procedure.

SUMMARY

The diagnoses of carcinoma can easily be made, due to the position and location of the cervix. The treatment of this dreaded disease, which haunts every home, can largely be planned on the basis of cellular and clinical classifications. Not only are these classifications the most important determining factors in treatment, but they are also the bases by which we compare results.

In order to evaluate treatment, we must carefully follow cases and never discharge patients. Enormous amounts of money and time have been and are being spent on the etiology of cancer, and propaganda to the laity so that we may see cases earlier. Up to this time, the results of all of this have been discouraging. We continue to see cases late, but this is all the more reason why we should take what we have and do the very best we can with it.

ABSTRACT OF DISCUSSION

Dr. E. O. Strassmann, Houston: If one reads articles on medicine in magazines for the general public nowadays, he gets the impression that we have arrived at a point where no one can die from any dis-

ease anymore. Medicine seems to have an answer for every illness and every complication. Under these circumstances it is more than necessary that we are honest among ourselves. It is gratifying to listen to a paper which deals with our shortcomings. Dr. Weaver tells us that for twenty-five years the survival rate in cancer of the cervix has remained essentially unchanged. He makes suggestions to improve this situation. I should like to stress three of his points.

POINT 1: The value of pathologic and clinical classification. Concerning the pathologic classification, the methods of both Martzloff and Broders have their place. The cell type as well as the percentage of undifferentiation have to be taken into account. It has to be remembered that different sections of one and the same growth can show different grades of cell maturation and character.

Concerning the *clinical* classification, I agree that a subdivision of the early cases is indicated. To have four main groups, however, is generally accepted. It would add to the confusion, if one would try to change into six groups. I would suggest to subdivide Group I of Schmitz into Ia for the microscopically visible cancers and Ib for the macroscopically visible superficial cancers. Group II of Schmitz would remain the same, i.e., the cancers limited to the cervix. Group III of Schmitz could be subdivided into IIIa for cancers with partial infiltration of the parametria and vagina, and IIIb for the frozen pelvis cases. Group IV would remain the same, i.e., cases with involvement of bladder, rectum, metastases, etc. Thus we would have a true subdivision of the original four groups into the six groups of Weaver.

POINT 2: The cooperation between gynecologist, radiologist and pathologist. Dr. Weaver is right; it is true that with a sigh of relief, we sometimes turn these tragic cancer cases over to the radiologist and withdraw to a certain degree from the full responsibility of carrying on with him. The closest cooperation also with the pathologist is the only way to better results.

POINT 3: The advocation of surgery. The speaker is to be complimented that he calls our attention to the fact that in this era of the sulfonamides and penicillin the dreaded mortality of operations for cancer of the cervix could be reduced. There is no doubt that early clinical cancers with low grade radioresistant cell pathology will have better results with surgery than with radiology alone.

The question is not any more radiation *versus* operation, but surgery *and* radiation in carefully selected cases.

The inoperable Groups III and IV (Schmitz) or IV, V and VI (Weaver) will have to be handled by radiation only as before. But a good percentage of the early cancers will benefit from the concentric attack by all available weapons, the knife, radium and x-ray.

Dr. Weaver does not give us any figures concerning his patients and results of various types of treatment. We are looking forward to that. Any leading institution should publish these data at regular intervals.

Careful study and publication has helped to reduce the maternal death rate in this country. The same system should also help to reduce the mortality caused by cancer of the cervix.

STATE BOARD MEDICAL EXAMINATIONS

The Texas State Board of Medical Examiners will hold an examination session at the Adolphus Hotel, Dallas, Texas, September 4, 5 and 6. Complete information regarding the examinations may be secured from T. J. Crowe, M. D. Secretary, Texas Bank Building, Dallas.

THE PALLIATIVE TREATMENT OF INCURABLE MALIGNANT DISEASE

J. R. MAXFIELD, JR., M. D.
DALLAS, TEXAS

The palliative treatment of incurable malignant disease is a vast subject. It will be possible to cover only the important points in this subject. It is unfortunate that a large percentage of the patients who consult physicians for the first time are found to be in the category of incurable malignant disease. Educational means are going forward to encourage patients to report frequently for examinations. This will aid in the early diagnosis of malignant disease. The physician who first sees the patient with malignant disease should urge that the patient have the most competent medical care possible. In many cases with incurable malignant disease, the patient is offered no encouragement for relief by the physician. Frequently the family is informed of the grave prognosis and little if any effort is made to alleviate the suffering or prolong the life of the patient.

It is difficult to understand the attitude that is assumed toward the patient with incurable malignant disease. This patient is given but little encouragement by his doctor and frequently very little attention. It is interesting to compare the treatment of the average patient with coronary occlusion and the average patient with incurable malignant disease. In so far as the life expectancy of the two groups of patients is concerned, there is little difference. It is evident, however, that the patient with coronary occlusion will get the careful attention of the doctor and a well prescribed program of rehabilitation. In contrast to this the patient with malignant disease will usually get but little attention. Many of the patients with incurable malignant disease, under proper care, can be returned to a state of physical vigor and mental activity which is not obtainable by the patient with coronary disease, regardless of how completely the medical management is carried out.

The aim in the treatment of incurable malignant disease should be to preserve the patient in the best possible physical and mental condition for the longest possible time. It is only with the full confidence of the patient that the greatest good can be accomplished. The treatment of malignant disease should be individualized so that each case can be treated in the most efficient manner.

The treatment of the patient with incur-

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able malignant disease should be carried out by two methods of approach. The first method of approach should be aimed at the treatment of the patient as a whole. The second plan of approach should be aimed at the treatment of the specific lesion or disease.

In the treatment of the patient as a whole, it must be remembered that the proper nutritional balance is a vital consideration. This means an adequate food and fluid intake, as well as proper vitamin and mineral constituents. It is well to mention that when possible the patient should have sufficient physical activity, a stimulating environment and relief from pain so that a good appetite will be present. It is also possible that in many instances it is necessary to supplement the appetite by the use of carminatives or tonics, as well as by the injectable vitamins and liver. The problem of adequate nutrition can be approached from many angles and it is possible in almost every patient to maintain an adequate balance, if necessary care is given to planning for the patient. The likes and dislikes of the patient toward food must be considered and it may be necessary to balance the diet in a more or less unorthodox manner, so that full use of the patient's culinary taste can be utilized.

The care of the patient's mouth and teeth is important and after each feeding a thorough cleansing of the mouth and teeth should be recommended. The care of the teeth will depend to a great extent upon the patient and he should be thoroughly instructed in oral hygiene.

The personal hygiene of the patient should not be neglected. He should have frequent baths as a part of the regime. These should be often enough to keep the patient clean. Adequate dressings should be applied and changed frequently when necessary to keep open lesions as clean as possible. Deodorants should be exploited to the full extent of their usefulness.

The proper function of the bowel and urinary tract should be carefully checked and procedures to augment sufficient elimination should be carried out. These procedures may vary from the administration of medications by mouth to such surgical procedures as ureterostomy or colostomy. The procedures to be used will depend upon the general condition of the patient and the cause of the interference with the elimination through these systems.

The relief of pain deserves the careful consideration of the physician. There are many drugs available which can be used. The selection of these drugs or combination of drugs should be made in an individualized manner and prescribed for the patient to be treated, rather than in a "rubber stamp" made to cover all patients in this category. It is needless to mention that narcotics should be withheld as long as possible. The combination of drugs with high analgesic effect and those with sedation qualities is to be strongly recommended. The usefulness of certain drugs, such as prostigmin in a catalytic manner with the narcotics, is worthy of consideration.

The usefulness of preparations, such as cobra venom, has been widely investigated and although useful in only a small per cent of cases, has been sufficiently effective to bear the consideration of the therapist.

The usefulness of sterilization by radiological methods or by surgery has been known for many years. It will frequently produce amelioration of pain from metastatic lesions and give prolongation of useful life. There has recently been the addition of certain estrogenic substances which are also of value in relieving the pain from malignant disease. These can be given with impunity and should be prescribed in adequate doses over sufficiently long periods of time before they are discarded as ineffective.

If pain is still a persistent factor in spite of all methods of therapeusis, it should be remembered that a cordotomy or a nerve section can be done to relieve pain. While a cordotomy or nerve section is not without some danger, it can be accomplished by a competent neurosurgeon without great discomfort to the patient and is frequently a procedure which is well worth while.

The second plan of approach in the treatment of incurable malignant disease is directed at the lesion or the disease itself. There is some necessity in overlapping between the treatment of the patient as a whole and the treatment of the lesion or the disease. They should go hand-in-hand. The treatment of malignant disease requires a thorough knowledge of the characteristics of growth, spread, and development of tumors of the various types. Malignant disease has many manifestations, the primary purpose being to terminate the life of the host. It invades normal tissues and destroys their usefulness. It forms bulky, space consuming tumors. It places an additional nutritional drain on an already depleted reserve.

Bulky and ulcerating tumor masses should be removed by simple surgical excision. Amputation is sometimes necessary when an extremity has extensive involvement. A clean healed stump is much preferable to the useless necrotic hand.

Radiological treatment of incurable malignant disease should be directed toward producing as little reaction as is possible and

still accomplishing the palliative result. This is particularly true in the case of lymphoblastoma, where multiple small doses given at intervals are to be preferred over single large doses. The x-ray treatment for the frozen pelvis should fall short of what is usually given in the treatment of an early case. The extreme skin reaction and the general malaise should be avoided if possible. The treatment of lesions in the stomach and in the esophagus is to be strongly advised. It is surprising the number of patients with carcinoma or sarcoma of the esophagus or stomach who will show marked improvement following radiation therapy. If the case is one in which surgical removal can be accomplished, this should be strongly recommended. In all patients who have metastatic malignant disease in the lungs who are experiencing dyspnea, x-ray treatments should be given. The response to x-radiation in cases with radioresistant tumors will many time be phenomenal.

It must also be remembered that in the group of so-called malignant diseases, an occasional patient will be encountered whose response to treatment is excellent and in whom additional intense treatment can be carried out for prolongation of useful life.

The treatment over localized areas of pain from metastatic carcinoma in bones is usually satisfactory, producing alleviation of pain.

I want to say again that the treatment of incurable malignant disease is a coöperative function between the surgeon, the radiologist, and the internist. I want also to stress that patients with incurable malignant disease deserve careful attention from their physicians and that they should be given every alleviation possible. Since one cannot determine from the physical examination, the history or the microscopical appearance of the tissue exactly how a malignant tumor will respond to treatment, I believe that palliative treatment is indicated in the care of incurable malignant disease. Where the patient shows evidence of marked regression of localized tumor and there is no evidence of metastatic involvement, additional intense radiation or surgical procedures are indicated.

ABSTRACT OF DISCUSSION

Dr. Asa Seeds, Dallas: In connection with the very interesting subject so ably presented by Dr. Maxfield, I should like to very briefly emphasize two philosophic points, to wit:

1. That a great deal of the medicine practiced on elderly people—incidentally the customary cancer age—is palliative whether it be by radiology or by surgery or even by the internist in the commonest cause of death, heart disease, so there is no grounds for us to be apologetic over palliative treatment. It is no more fair for the surgeon to criticize our inability to cure than it is for him to take stock of his own ability to cure similar diseases, and we can both actually salvage more "man-years" if we collaborate and coördinate efforts from both fields than if we contest and compete with the patient an innocent pawn.

2. Much more can be accomplished with palliation as soon as the opportunity is recognized than if the advising doctor deliberately waits until the situation is one of morbidity or extremis and the treatment can only be offered as a hopeless last resort. In practically all instances early prophylaxis is more productive of the desired results than late.

PHYSICAL FACTORS IN CANCER

W. A. SELLE, M. A., PH. D.*
GALVESTON, TEXAS

While a great variety of chemical agents have been found to stimulate or modify tumor formation, relatively few physical agents have been shown to act similarly. Nevertheless, both clinical and experimental evidence points to the fact that certain physical factors play an important part in the production and continued development of some tumors. Agents such as heat, ultraviolet light, gamma and roentgen rays have been repeatedly proven to initiate the cancer process in experimental animals; the evidence is equally strong that they can and do cause cancer in man. The exact mechanism by which these agents bring on the malignant state is, however, still unexplained.

PHYSICAL FACTORS IN THE ETIOLOGY OF TUMORS

The role played by physical agents in the specific etiology of neoplasms is seen in various tumors connected with certain occupations, as x-ray and radium cancer, sunlight cancer of farmers and sailors, the rare cancer of the lung in metal workers. The accumulative effects of the habits of man are seen in cancer of the lip, pharynx, and larynx of smokers, and in Kangri and Betel-nut cancer of the natives of India. Chronic irritation precedes many well known clinical forms of cancer, as epithelioma of the tongue from jagged teeth, cancer of the uterus, stomach, urinary passage, nose, and other areas. Trauma, according to Ewing, seems to be a tangible factor in the origin of certain tumors of bone, fat, and other tissues.

It is possible that carcinogenic chemicals are produced by or associated with the irritation, trauma or inflammation following exposure to specific physical agents. The action of such agents may therefore be secondary and indirect. Unless acting in combination with predisposing conditions, physical agents are incapable of inducing tumor growth.

Prepared for reading before the Section on Clinical Pathology, Annual Session, State Medical Association of Texas, Galveston, May 8-10, 1945, cancelled because of war conditions.

*Professor of Physiology, University of Texas, School of Medicine, Galveston; and Consultant, Department of Pathology, M. D. Anderson Hospital for Cancer Research, Houston.

Special extrinsic factors may therefore exist, but tumors fail to develop because of the absence of the predisposing intrinsic factor, which depends on heredity.

TRAUMA AND TUMOR FORMATION

Much has been written about trauma—the commonest of physical irritants—and cancer. So much, in fact, has been written that trauma has become a term of common usage. It is used by laymen as well as by biologists and clinicians with such diverse connotations that one can never be sure just what is meant. It is not uncommon to read of malignancies being attributed to trauma, especially when a case for compensation can be based on this assumption. A sharp distinction is drawn between the effect of a single mechanical injury and the long continued irritations which have been the origin of some scar, ulcer, or special inflammatory lesion upon which a tumor later develops. In the latter group there are unquestionably many genuine cases. As used here and in accordance with the suggestions of Ewing, the term trauma excludes the various forms of chronic irritation, inflammation, surgical wounds, cicatrization, and chemical escharotics; the term signifies a single or repeated, more or less contusing, crushing, or lacerating mechanical injury.

In recent years, views on the relations of trauma to malignant tumors have been changed owing to the more critical attitude of clinical observers, to the evidence furnished by careful statistical studies and to a large extent to the bearing of recent studies on the experimental production of tumors.

Numerous efforts have been made to produce neoplasms in animals by mechanical and other forms of simple trauma, but the results have been uniformly negative and they indicate that when a tumor follows trauma other factors are introduced. Ribbert used a great variety of mechanical insults designed to imitate the conditions produced by trauma in man. He succeeded in producing a small fibro-epithelial-papillomatous tumor of the rabbit's lip by repeated scraping of the regenerating epithelium. In this and other organs he saw atypical growths of mechanically displaced epithelium, but in no instance was a malignant tumor observed. Marsh, too, used a large variety of mechanical devices and procedures (pricking, stabbing, cutting, scraping, bruising and crushing) for injuring the superficial as well as the deeper tissues of more than 1,100 mice. Only a few tumors developed; these appeared to be no more numerous than those occurring in a group of uninjured controls.

Marsh also subjected the breasts of breeding mice of a high tumor strain to crushing injuries repeated at three-day intervals for the life of the animal. He failed to increase significantly the number of mammary tumors. The mouse breast, which in some strains is very susceptible to cancer by estrogenic compounds, is therefore not susceptible to ordinary mechanical injuries.

Ewing states: "The clinical impression that normal tissues may react to injury by malignant proliferation is so much at variance with what is known about the origin of most tumors that it has always been regarded with skepticism." The incidence of well-attested traumatic tumors in man is extremely low. The high proportions published by many old and some recent writers are wholly lacking in value because the observers give no indications that they made a serious effort to establish the actual facts, or that they understood the nature of scientific or medicolegal injury.

In records of the New York Compensation Bureau, Lewy found 37 malignant tumors among 26,389 injured persons, which is about the normal incidence of tumors among the general population. Leclerq (European medicolegal expert) reported the occurrence of about 5 or 6 traumatic tumors in 100,000 injuries. Schad investigated 247 cases claimed as traumatic cancer and accepted only 52, 32 of which the tumor developed in an open wound that never healed. Many authors have commented on the small number of traumatic cancers observed in World War I.

In very rare instances a single trauma in man has, apparently, caused the appearance of a malignant tumor. This correlation is assumed chiefly in connection with the sarcomata of bone and soft parts; it is rarely maintained for carcinomata. Ewing, Knox, Hartman and others admit that since clinical facts occasionally suggest traumatic origin, it is necessary to consider trauma as a possible although not proven causative factor. Certain conditions in the injured tissue, such as already established cells, precancerous cells, misplaced and undeveloped organs, may explain the appearance of a tumor following trauma; yet the search for anatomical predisposing factors has not clarified the problem. The solution must be worked out on tissues which are originally anatomically normal and in which specific conditions are produced by mechanical injury.

A full explanation of the traumatic type of tumors requires the assumption of special local or general predisposing factors which have never been traced in the microscopic or test tube. It is possible, as Ewing suggested several years ago, that products of autolysis or decomposition of tissues may

exert a peculiar influence on regenerative processes. Here again we might mention the possibility of specific chemical agents. The structural relationship of certain carcinogenic hydrocarbons to compounds naturally occurring in living animals have suggested the possibility that under favorable conditions these substances may be transformed into carcinogenic substances. The discovery of methylcholanthrene, benzpyrene and dibenzathracene has thrown much doubt on the validity of the old doctrine of simple chronic irritation as an adequate explanation for any cancer, and tends to replace it with the theory of specific chemical irritants. The presence of such substances in traumatized tissues has not, of course, been demonstrated.

The writer has recently studied the influence of trauma on the development of skin tumors produced by the application of a potent chemical carcinogen. A group of 400 mice were painted twice weekly with a 0.5 per cent solution of methylcholanthrene in benzene. Approximately one-third of the animals were further subjected to concurrent thermal irritation when the area painted was also cauterized at weekly intervals with a hot wire. Another group, similar to the first in size, received mechanical injuries at the site of application of the carcinogen. Such cutaneous injuries consisted of superficial interdigitating incisions made twice weekly with a hypodermic needle, and of perforations, 1 mm. in diameter and involving all layers of skin, made twice monthly with a small punch. The remaining animals served as controls. Neither the thermal nor mechanical injuries accelerated the development of tumors at the site of application of the carcinogen. If anything, the concurrent trauma diminished the number of tumors. The studies are now being extended to determine whether trauma applied after the pre-neoplastic stage stimulates the formation of cutaneous neoplasms.

There is also experimental evidence to indicate that injury to the deeper tissues has no effect on the genesis of tumors arising from such areas as the result of injected carcinogens. Boyland and Burrows observed no acceleration of tumor formation when fine silica was injected along with dibenzanthracene. Likewise, Des Ligneris was unable to augment tumor development by injecting glass particles with methylcholantrene or benzyrene. Woglom injured glandular epithelium by drawing threads soaked in benzpyrene through various animal organs but this trauma plus hydrocarbon did not induce tumors in the various organs.

Certain physical agents have proven particularly effective and specific in their carcinogenic action. Long exposure to gamma rays of radium produces epithelioma, and radium deposits in the bone lead to osteogenic sarcoma. Both carcinoma and sarcoma have been observed to follow x-ray inflammation in man and animals. Sunlight cancer is clearly traceable to the actinic rays and numerous observers have produced cancer of the skin by exposure to ultraviolet rays. The uniform success in the experimental production of cancer by these specific agents is sharply contrasted to the repeated failures to induce malignant disease by simple trauma, and establishes a strong presumption against a traumatic origin. They indicate that trauma itself is incapable of producing a malignant tumor in normal tissue.

TRAUMA AND ESTABLISHED TUMORS

It is often alleged that mechanical injury (1) aggravates a pre-existing tumor and hastens the death of the patient; (2) accelerates the growth of a latent cancer to renewed activity; (3) hastens the course of the disease by weakening the patient. Most observers now believe that such assumptions have little basis.

The contention that injury accelerates tumor growth receives no support from the work of Marsh, who subjected a series of mouse and rat carcinomas to crushing injuries and observed no acceleration of growth; indeed, he often observed definite retardation.

While a severe crushing injury of a malignant tumor may possibly produce precocious metastases, there is little presumption in favor of such an event. Ewing points out that many of the five-year cures of osteogenic sarcoma in the American Registry of Bone Sarcoma are of cases in which surgical biopsies were performed. The assumption that trauma leads to metastases is also disproved by experimental procedures. Both Lubarsch and Marsh severely bruised mammary tumors in lower animals without observing any increase in the number of metastases. Lubarsch failed entirely to localize metastases in tumor-bearing mice by fracturing bones.

The type of injury which seems capable of producing metastases is forcible squeezing and rough massage. Various observers have found that massage of certain tumors in lower animals increases the number of cell emboli in the lungs and the number of metastases.

In rare exceptions injured tissues tend to sift out bacteria and foreign bodies into the blood stream and it is conceivable that trauma may cause the localization of metastases. The chances are against the lodgment of single cells or occasional emboli in an injured area under normal conditions; vagrant cells

and emboli are usually sifted out by the lungs and regional lymph nodes. Nevertheless, the event may occur, according to Ewing, when tumor cells are numerous in the circulation and presumably only in the late stages of the disease, when it can cause little or no alteration in the prognosis. Ewing has recorded a case in which hypodermic injections in the deltoid muscle seemed to cause the lodgment of metastases of testicular carcinoma in the late stages of the disease.

RADIANT ENERGY IN CANCER

1. *X-Rays.*—It has already been indicated that several forms of radiant energy (gamma, roentgen and ultraviolet rays) play an important part in the clinical and experimental production of tumors. While the frequency of development of carcinoma from x-ray dermatitis places these observations virtually in the experimental class, deliberate employment of x-rays for the production of tumors was reported by Maine, Clunet, and Baulat-lapointe and by Jonkhoff for experimental animals. The former described the exact dosage and procedure for the production of malignant tumors in the rat, the latter in mice.

It has been demonstrated that leukemia of mice develops after exposure to x-rays, as it does after the application of certain chemical carcinogens. Seven hundred to 900 *r* of x-rays, administered by fractional irradiation of 80 *r* daily on successive days, produces leukemia in some strains after 120 days. The latent period for x-rays is slightly longer than that for methylcholanthrene. Kirshbaum and Kaplan at the University of Minnesota have recently shown that certain strains resistant to the leukemogenic action of methylcholanthrene are susceptible to x-rays, while strains resistant to the leukemogenic action of x-rays are susceptible to the action of chemical carcinogens. Thus mice of a certain genetic constitution are susceptible to only certain carcinogenic agents. The observation indicates that the mechanism for the development of leukemia by physical agents is not the same as that for chemical agents.

2. *Radium and Lung Cancer.*—There is a growing conviction in this country as well as in Europe that radiation by radon inhaled for a long time or emitted from radioactive deposits in the lungs cause cancer in man. This contention is based on the fact that primary carcinoma of the lung accounts for more than 50 per cent of the causes of death of miners of Scheenberg and Joachimsthal, where pitchblende is obtained. Such mines contain radon in high concentration. With the increasing use of radium in industries it is important to know whether radiations from radioactive substances induce pulmonary tumors.

Many detailed investigations have been conducted in Scheenberg and elsewhere but the cause of cancer in pitchblende miners is still unknown. The long maintained belief that the continuous inhalation of radon is responsible is not supported by consistent, clean-cut animal experiments. This subject has been reviewed recently by Lorenz of the National Cancer Institute. Despite the fact that one group of investigators reported that each of 12 mice exposed to 3,200 ME of radon developed tumors of the lung (10 adenomas, 1 adenocarcinoma and 1 malignant blastoma), most writers on the subject conclude that it is doubtful whether radon can induce lung tumors in experimental animals or man. Supporting the contention that radioactive substances in the dust inhaled by pitchblende miners do not cause the lung tumors, Le Daet has stated that in Belgium, where most of the radium of the world has been prepared, no instance of cancer of the lung was observed in radium workers over a period of twelve years. Yet the workmen are literally covered with dust and absorb it all the time, especially from the mouth; they are reported to be yellow from head to foot and refuse to wear masks. As further proof that radon itself is not the cause of lung tumors, Martland's investigations have been cited of luminous dial painters who develop only bone sarcoma although they inhale radon continuously.

CLIMATIC FACTORS AND CANCER

Converging evidence from a number of sources indicates that climatic factors may influence malignant growth in both man and animals. The evidence until recently has been based on spontaneous tumors in man under uncontrollable conditions. Hoffman, Koller and others have reported that the general cancer rate declines progressively with the approach to the equator. Mountin and Dorn, and Gover and Collins have statistically analyzed cancer rates in the United States with respect to geographic variations and climate. Their data show a somewhat higher rate for the commoner types of cancer in the Northern States, as compared with the Southern, with the exception of skin cancer which appears to be more prevalent in states with warmer climates.

Temperature.—Cancer data obtained from different geographical areas are of course always open to the criticism that diagnostic errors or inaccuracies of death certification may mask the real disease frequency more in some regions than in others. Experimental evidence has been obtained which strongly supports the likelihood that there is a real climatic factor in tumor production. Fuller,

Brown and Mills, and Wallace and Mills have shown that dba mice with a high normal incidence of mammary cancer become almost free of tumors when raised in tropical moist heat. Wallace, Wallace and Mills have recently extended these general findings for C_3H mice. The spontaneous mammary tumors of these animals appear one month earlier and grow faster at 68 F. than at 91 F. Although tumors developing in the high air temperature kill their hosts more quickly, multiple tumors are four times more frequent among mice maintained at 68 F. than among those kept at high temperatures.

Our own experiments, over a period of eight years, with spontaneous mammary cancer in C_3H mice, point to a similar conclusion. The incidence of mammary tumors among our breeding C_3H mice is less than 20 per cent (18.7), whereas northern laboratories (in Maine, Connecticut and Minnesota) report incidences well over 90 per cent. The greatly reduced incidence here may be related to a diminished reproductivity, since ovarian activity definitely influences the frequency of mammary tumors in mice.

Experimental tumors of another type—chemically induced and transplantable—respond quite differently to temperature. The growth and development of these, like that of normal tissues, is accelerated at higher temperatures and retarded at lower. Wallace, Wallace and Mills state that subcutaneous tumors induced by the injection of methylcholanthrene arise earlier and grow faster in mice adapted to a constant tropical environment (91 F., 50 per cent relative humidity) than do litter mates kept at 68 F. Sugiura observed that while the number of takes of the transplantable mouse sarcoma 180 were not influenced by high or low body temperatures, the subcutaneous tumor grew more rapidly in mice living at a normal room temperature (70 F.) than at a temperature of about 40 F. Various investigators have found that transplantable tumors develop slowly in the subcutaneous tissues of animals kept in the cold-room but grow rapidly in the deeper and warmer tissues of the same animals.

Environmental temperatures probably play their part in two ways: (a) by altering the blood supply to the skin for heat loss purposes; and (b) by affecting metabolic activity in deeper tissues—stimulation in cool surroundings and depression in the hot. While actinic radiations from the tropical sun seem to be a factor operating with radiant heat in stimulating tumor growth, Wallace, Wallace and Mills report that hot-room mice show an increased susceptibility to skin cancer in the absence of such actinic radiation. Experiments on ultraviolet carcinogenesis in mice also show effects of temperature. Bain, Rusch and Kline recently found that animals maintained in chambers at 95 F. to 100 F. develop tumors definitely sooner than at a room temperature of 68 F. Little difference, however, was found in the rate of carcinogenesis at 40 F. and at normal room temperature.

Several observers (Bischoff and Long; Hill, Rutledge, Ware and Schultz), have reported that intermittent hypothermia induced daily for six to twelve hours and continuous hypothermia for several days duration retard some transplanted tumors. Goldfeder found that small tumors (mouse sarcoma 180) disappear in some animals subjected to an intermittent or continuous hypothermia of 8 to 48 hours; only a slight decrease in tumor size was found in other animals. Tumors which had attained a relatively large size were not affected. Most observers agree that the high mortality rate, the comparatively few successful results and the unaffected viability of tumor cells, demonstrate the inadequacy of refrigeration in the treatment of malignant growths as proposed by Fay and Smith.

ULTRAVIOLET LIGHT AND CANCER

Much evidence has accumulated to indicate that sunlight is an important etiological factor in cutaneous cancer of man. Roffo, who has been particularly active in defense of this theory, has presented an argument based on three principal sets of evidence: (1) malignancy of human skin appears most frequently on those parts of the body most exposed to light; (2) malignancy of the skin may be produced in laboratory animals by prolonged exposure to light; and (3) a direct relationship between cholesterol content of the skin, exposure to light and the incidence of malignancy.

Roffo subjected rats to ultraviolet rays for twenty hours daily for six months and observed tumors on the eyes, ears, and back of the head in a large number of animals. Later, he exposed rats to direct sunlight for five hours daily: Of 235 animals surviving a period of nineteen months, 165, or 79 per cent, developed tumors. The areas affected were those unprotected by hair, and the histologic form differed with the site of the tumor. Spindle-cell sarcoma developed on the conjuctiva of the eyes, and carcinoma on the nose and fore-foot. Of the tumors of the ears, 58 per cent were carcinoma, 36 per cent spindle-cell sarcoma, and 6 per cent carcinosarcomas; of those on the eyelid, 50 per cent were carcinomas, and 50 per cent were spindle-cell sarcomas. Findlay exposed

mice to ultraviolet rays after removing the hair from certain areas with sodium sulfide. Typical epitheliomas at the site of the denuded areas were produced. Similar results have been obtained by many workers. Putschar and Holtz, who obtained epitheliomas in mice without depilation, believe that close histologic relations exist between ultraviolet ray cancer and the precancerous light dermatoses occurring in man. These workers are convinced that their experiments show the etiologic role of ultraviolet rays in human skin cancer.

While mercury arc radiation produces tumors in rats and mice, caution is necessary in carrying over the evidence from these experiments to the case of man. Much publicity has been given to the far-reaching results of the work initiated by Roffo. In 1935, the Academy of Medicine of Paris appointed a committee to verify the above findings. The work was confirmed and the potential danger of excessive exposure of the individual to sunlight, as by sun baths, was stressed by this committee. The heliotherapists and actinotherapists were warned to consider the situation from a prophylactic point of view. While these far-reaching conclusions are justified, some writers have pointed out it is unlikely that many individuals would be exposed to sunlight or artificial ultraviolet light for a time sufficient to produce cancer. One year in the life of the rat is comparable to thirty years in the life of man. Beard states that in order to produce cancerous changes in the rat an average of seven months of continuous irradiation is required; in the case of man, this would be equivalent to twenty hours of ultraviolet irradiation daily for eighteen years.

Recent Experimental Work. Rusch, Kline and Baumann, at the University of Wisconsin, found that the effective wave lengths of the spectrum are between 2900 and 3341 angstroms. The carcinogenic wave lengths thus coincide in part with those most potent in the production of erythema, but a wave length of 2537 angstroms produces erythema without producing tumors in mice. Apparently, very little radiant heat energy is needed to initiate those changes which culminate in tumor formation. Blum and Lippencott found that the shorter wave lengths—those around 2500—are ineffective as they are absorbed by the stratum corneum.

The determination of the wave lengths that produce tumors in experimental animals is an important finding, since these are probably the same wave lengths that affect human skin. Because various investigators have used different sources of ultraviolet rays, different wave lengths, different operating conditions and distances from the source of the rays, it is difficult to make a comparison of the minimal effective dosages employed in producing tumors. The minimum time for the development of mouse tumors (according to Rusch, Kline and Baumann) is about two and one-half months, and it is not necessary to irradiate the animals throughout the precancerous period. Once initiated, carcinogenesis proceeds without further exposure; sometimes several months elapse between the end of irradiation and the appearance of tumors. Blum and Grady have reported that the induction time in mice is shortened when the same weekly dose is given in smaller and more frequent exposures, and that the appearance of tumors occurs sooner in old than in young mice given the same dosage. Within rather wide limits, the induction time does not vary significantly with the intensity of radiation.

SKIN CANCER IN TEXAS

Cancer in the skin of man occurs most frequently on the exposed portions of the body, notably the face, and here the initiating factor has been assumed to be strong sunlight or salt spray or a combination of both. There seems to be no question as to the frequency of such growths in farmers, sailors and others exposed to the weather. Peeler states that the skin cancer in the U. S. Navy is eight times that found among men of the same age in the general public. A statistical survey made several years ago by Phillips indicates that the incidence of skin cancer is higher in Texas than in any other state in this country. Phillips found that ranchers and their wives are much more likely to develop malignant tumors than Texans engaged in business, the professions, labor, or the industries. Shreck has found that the incidence of carcinoma of the exposed skin and the lips, and of keratosis of the skin is very low in the Negro; carcinoma of the covered or protected colored skin, however, is as frequent as that of the covered white skin.

SUMMARY

Space does not permit here an extension of the subject of physical factors in cancer. In conclusion I can only re-emphasize the urgency of continued research along two broad lines: First, studies in the etiology of cancer to the end that eventually we may find methods of better controlling the disease if not completely eliminating it. This includes studies in the hereditary disposition which provides the susceptibility of individuals. Second, studies in the external provocative causes of cancer, in order that we may learn to prevent the development in persons susceptible by heredity. These inciting or excit-

ing agents, which are not cancer producing under ordinary conditions, become effective only after acting on tissues of a relatively long time. This fact gives us some hope for preventing certain types of malignancy, such as occupational cancer, until such a time as we find a method for entirely preventing the disease.

REFERENCES

1. Apperly, F. L.: Relation of Solar Radiation to Cancer Mortality in North America, Cancer Research 1:191-195 (March) 1941.
2. Bain, J. A., Rusch, H. P., and Kline, B. E.: The Effect of Temperature upon Ultraviolet Carcinogenesis with Wave Lengths 2,800-3,400 A. Cancer Research 3:610-612 (Sept.) 1943.
3. Blum, H. F.: Photodynamic Action and Diseases Caused by Light, American Chemical Society, Monograph Series, No. 85, Chapter 21, pp. 251-257, 1941.
4. Blum, H. F., Grady, H. G., and Kirby-Smith, J. S.: Relationships between Dosage and Rate of Tumor Induction by Ultraviolet Radiation, J. Nat. Cancer Inst. 3:91-97 (Aug.) 1942.
5. Blum, H. F., and Lippincott, S. W.: Carcinogenic Effectiveness of Ultraviolet Radiation of Wavelength 2,537 A. J. Nat. Cancer Inst. 3:211-216 (Oct.) 1942.
6. Ewing, J.: Neoplastic Diseases, ed. 4, Philadelphia, W. B. Saunders Company, 1940.
7. Fuller, R. H., Brown E., and Mills, C. A.: Environmental Temperatures and Spontaneous Tumors in Mice, Cancer Research 1:130-133 (Feb.) 1941.
8. Goldfeder, A.: The Effects of Reduced Temperatures upon the Growth and Metabolic Changes of Sarcomas 180 Grown in Vivo, Cancer Research 1:220-226 (March) 1941.
9. Gover, M.: Cancer Mortality in the United States. II. Recorded Cancer Mortality in Geographic Sections of the Death Registration States of 1920, from 1920 to 1935, Pub. Health Bull. 252:1-74, 1940.
10. Hill, R. M., and others: The Effects of Lowered Body Temperatures on Methylcholanthrene Fibrosarcomas in Rats, Cancer Research 3:841-848 (Dec.) 1943.
11. Kirschbaum, A., and Kaplan, H. S.: Induction of Leukemia in Mice, Science 100:360-361 (Oct. 20) 1944.
12. Lorenz, E.: Radioactivity and Lung Cancer; A Critical Review of Lung Cancer in the Miners of Schneeberg and Joachimisthal, J. Nat. Cancer Inst. 5:1-15 (Aug.) 1944.
13. Marsh, M. C.: On an Ambivalent Effect of a Single Acute Trauma on Growth of Transplanted Mouse Tumors, Am. J. Cancer 17:735-742 (March) 1933.
14. Mountin, J. W., and Dorn, H. F.: Some Peculiarities in the Geography of Cancer, J. A. M. A. 113:2405-2410 (Dec. 30) 1939.
15. Peller, S., and Stephenson, C. S.: Skin Irritation and Cancer in the United States Navy, Am. J. M. Sc. 194:326-333 (Sept.) 1937.
16. Phillips, C.: The Relationship between Skin Cancer and Occupation in Texas: A Review of 1,569 Verified Lesions Occurring in 1,190 Patients, Texas State J. Med. 36:613-616 (Jan.) 1941.
17. Roffo, A. H.: Heliotropism of Cholesterol in Relation to Skin Cancer, Am. J. Cancer 17:52-57 (Jan.) 1933.
18. Schrek, R.: Racial Distribution of Cancer; Epithelial Tumors of the Skin, Lip, and Breast, Cancer Research 4:433-437 (July) 1944.
19. Sugiura, K.: The Effect of High and Low Body Temperatures upon Growth of Irradiated Mouse Sarcoma 180, Radiology 37:85-93 (July) 1941.
20. Wallace, E. W., Wallace, H., and Mills, C. A.: Influence of Environmental Temperature upon the Incidence and Course of Spontaneous Tumors in C3H Mice, Cancer Research 4:279-281 (May) 1944.

X-RAY IRRADIATION OF ESOPHAGEAL CANCER

One of the first recorded cases in which cancer of the esophagus has been treated successfully by x-ray irradiation is reported by C. A. Holland, M. D., Philadelphia, in *The Journal of the American Medical Association* for June 2. Cancer of the esophagus is considered practically incurable, since the diseased tissue in most areas cannot be removed surgically. According to medical records, there have been no lasting cures by irradiation in proved cases.

Dr. Holland reviews the case history of a 55-year-old woman in which four consecutive cancers occurred in different organs of the body within 10 years. All, including the cancer of the esophagus, apparently have been cured, two by surgery and two by x-ray treatment.

A CONCEPT OF THE ETIOLOGY AND CONTROL OF POLIO AND ITS COMPLICATION— INFANTILE PARALYSIS

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The cause of polio and its complication, infantile paralysis, is a bacteria which is ultra-microscopic or virus in form and is the same organism (in modified or attenuated form) which causes the common cold, influenza and its complication of lethargic encephalitis, and herpes in its many forms—zoster, labialis, supraorbitalis, et cetera.

More study has been made of the variable symptom-complex of this organism than any other; and the literature setting forth the clinical, statistical, and laboratory study has been so exhaustive as to be confusing.

Fifteen years ago Dr. Milton J. Rosenau, professor of Preventive Medicine and Hygiene of Harvard Medical School, and author of "Preventive Medicine and Hygiene" made the following observation:

"Increase of Infections of the Central Nervous System.—It is disconcerting to note the growing prevalence of various kinds of infections which expend their energy on the central nervous system. As the common communicable diseases are being controlled, infections of the brain, spinal cord, and nerves are growing. This increase is probably real, for it is not likely that these diseases are simply being uncovered. Certainly there has been a great increase in the amount of *infantile paralysis;* disseminated sclerosis is prevalent. The spread in the amount of encephalitis is alarming. Meningitis of varying forms rose during the World War and as a result of the influenza epidemic. There are evidently several forms of encephalitis in addition to the epidemic form described above, about which little is known . . . The relationship of this disease to herpes (shingles and fever blisters) is being studied. This is a fertile field for investigation and a subject concerning which little is known."

Dr. Rosenau described and was convinced of the presence of a pleomorphic (many forms) streptococci, and that this streptococci underwent changes, one of which was a virus or ultra-microscopic form, and thought that each form gave a different symptom-complex when it invaded the human organism. In fact, he was thought to have a strong bias in this conception.

At first glance it is difficult to see how the same bacteria can assume different forms and give rise to different symptom-complexes. On the other hand the pleomorphism and attenuated characteristics of other organisms have been demonstrated and thoroughly understood. One is the organism of smallpox, an extremely virulent virus, which when passed through the blood stream of the cow gives a relatively harmless organism and with which we can vaccinate the human organism and render it immune to the virulent disease-complex of smallpox.

It should now be stated that a pleomorphic streptococcus exists which in its life cycle of changing forms gives rise to different symptom-complexes to which we have given different names: the common cold, influenza, lethargic encephalitis, anterior poliomyelitis and its complication of infantile paralysis, and herpes in its many forms. It is certain that these varying symptom-complexes are caused by the same organism during different forms and in different attenuations and virulence and that the organism regardless of its stage within its life-cycle is carried in the nose and throat of both infected humans and carriers and spread by open coughing, sneezing, or spitting.

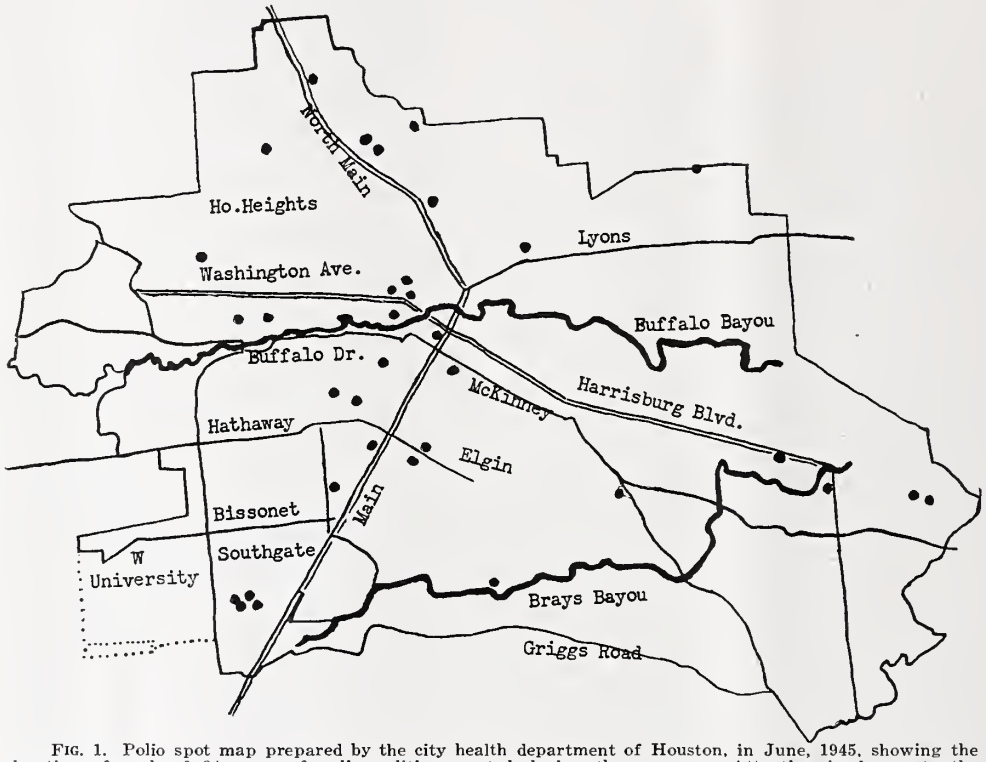

FIG. 1. Polio spot map prepared by the city health department of Houston, in June, 1945, showing the location of each of 34 cases of poliomyelitis reported during the summer. Attention is drawn to the fact that most of the cases follow the course of Main Street, through which pass the principal highways of travel in and out of Houston. A similar highway route follows Washington Avenue and Harrisburg Boulevard along which the remainder of the cases are distributed. This distribution significantly indicates the manner in which the disease is spread by human carriers.

Let us next consider the symptom-complex in which this organism manifests its effect upon the human organism in the form of the common cold in all its upper respiratory epidemic forms. We are familiar with its seasonal epidemic variations, its changing virulence, and—most important—the fact that it sometimes changes its characteristics and develops a peculiar affinity for certain portions of the upper respiratory tract. (Incidentally we recognize and understand the air-borne manner in which it is spread.)

Thus we have epidemics of common cold in which the organism has a predilection for the bronchi in which everyone is coughing, tonsillitis when all the tonsils are infected, laryngitis when everyone is hoarse, sinusitis when everyone has the painful symptoms of frontal and maxillary pain and discomfort. It even sometimes develops an affinity for the intestinal tract with epidemics of nausea, vomiting, and diarrhea. Sometimes this is called "intestinal flu."

Most significant, it sometimes develops a preference for peripheral and cutaneous nerves with the symptom-complex of neuritis, herpes zoster (shingles), and herpes labialis so common in colds to the extent that we label them "cold sores" or "fever blisters."

Now let us consider influenza and all its complications. There is no sharp line of demarcation between a severe cold and a mild case of influenza. When the virus becomes virulent to a marked degree we have the well-recognized and unmistakable epidemic of influenza. It is well-known and admitted that uncomplicated influenza does not kill. It lowers resistance so that the secondary invaders give rise to the fatal bronchopneumonia—that is, until we had available sulfa derivatives and penicillin.

Again the significant fact about influenza

is that as a complication, it develops (similar to the common cold when it affects the peripheral nerves to give rise to neuritis and herpes) a predilection to portions of the higher brain centers with a residual or permanent brain damage, which we call lethargic encephalitis. We observed many of these complications following the 1917-1918 epidemic of influenza, in which these patients developed a permanent clinical picture of the typical smoothed-out, expressionless, mask-like facies; coarse intention tremor; general rigidity; increased reflexes; bent attitude; slowness of action, propulsive gait; and peculiar characteristic scanning type of speech; they also had increased salivation from partial paralysis of muscles of deglutition. All this is in the nature of upper motor neuron partial paralysis, spastic in type.

If we can understand and accept these precepts, we can understand the symptom-complex of this same organism, which becomes epidemic in another form called polio, or anterior poliomyelitis, or (in its complication) infantile paralysis. It is important to consider the symptom-complex of the three stages of this epidemic form:

1. The incubation period has been noted from three to twenty days. This first stage is extremely capricious in its symptomatology, to such an extent that diagnosis is practically impossible. There may be fever, rigors, sweating, circumoral pallor, headaches, drowsiness, or restlessness, and irritability, hyperesthesia, or prostration, anxiety, nausea, vomiting, abdominal pain, diarrhea or constipation, coryza, nasal discharge, sore throat, or cough.

2. After an extremely variable period of time—approximately three to four days in my experience—the second stage begins, which brings mild to severe symptoms of central nervous system irritation: localized pain and tenderness, stiff neck, head retraction, rigid spine which may persist from three to four weeks, a positive Kernig sign, convulsions, delirium and increased tendon reflexes.

3. In the third stage we have the picture of the localization in the anterior horn cells of the spinal cord and is the complication we recognize as infantile paralysis and one in which the diagnosis can be made—but frequently too late to prevent the residual or paralysis. In this stage the Kenny treatment is the most effective. This stage is marked by tremors, twitching, ataxia, diminution or loss of reflexes, diminished electrical reactions, anesthesia, flaccid or lower motor neuron paralysis which is usually incomplete, weakness, stridor, pupil and lens abnormalities, diplopia, fixed eyeballs, urinary and fecal incontinence. Less than one-half of the patients have paralysis in any form, and most of them recover completely within one to twenty-four months, or the residual is practically unnoticeable.

Approximately one out of 100 develop this complicating third stage and therefore only a very small number of polio infections are diagnosed. Dr. Russell L. Cecil, professor of Clinical Medicine, Cornell University, in his text-book expresses this very accurately:

"*Epidemiology:* Because the virus of infantile paralysis cannot be detected in nature, and because 50 to 80 per cent of the cases escape paralysis and therefore in many instances go unrecognized, and further, because undetected carriers move freely through the community, the epidemiology of acute poliomyelitis is not yet established. The paradox of the isolated case remote from civilization, on the one hand, and the other the epidemic focus which offers the picture of mass group infection is well known but *not explained.*"

However, it is my unshakable belief and within my experience, that even these comparatively few cases, which reach the third or complicated stage which we call infantile paralysis, can be prevented if proper treatment is started either *in the first or second stage.* This therapeutic routine is simple in application, economical, and is based upon two objectives: (1) increasing the titre of antibodies against the specific strain of virus; (2) combating and overcoming the secondary invaders.

1. *Autohemotherapy.*—The patient's own blood is aspirated from a vein and injected into the hip muscle—gluteal muscle. The dosage is 10 cc. in the baby and 60 cc. in the adult, and the amount for other patients is proportioned in accordance with age and weight. This should be repeated daily for a minimum of three days regardless of improvement and preferably for five days. A small local anesthetic over the selected vein and site of injection into the gluteal muscle makes the procedure practically painless.

The rationale of this simple procedure is not known but will probably in the future be proven to be of a nature similar to that of autogenous vaccine but many, many times more effective. For all practical purposes it simply increases the titre of the antibodies against the specific virus in a rapid and most effective manner. Virus infection of this multiform organism is completely subdued by autohemotherapy. Injection of blood has been used without explanation and universally in many hospitals, and by many pediatricians and obstetricians when cerebral hemorrhage and brain damage is present in the new-born, simply because it was found beyond doubt that the procedure was conducive of good clinical results. (This is by way of example and has nothing to do with its application in polio.)

Autohemotherapy is completely dramatic in stopping herpes zoster or shingles, which is caused by this same attenuated organism. Those who have had or treated shingles know of the uncontrollable pain of this nerve infection which, without autohemotherapy lasts from six weeks to two months. After one proper and adequate administration of autohemotherapy the pain ceases, and after the third and last injection the vesicles begin to disappear and within a week the patient is well. I have treated over 300 cases of severe herpes zoster with complete and spectacular relief of pain and disappearance of the vesicles in from one to seven days, and with no failures. In like manner I have treated a large number of cases of suspected polio during epidemics *without a single residual or paralysis.* All of these suspected cases of polio had leukopenia and many had the second stage symptoms of opisthotonos and a positive Kernig's sign.

2. *Control of Secondary Invaders.*—Secondary invaders play an important part in all of the symptom complexes of this common organism. Other strains of streptococci, Micrococcus catarrhalis, Staphylococcus aureus and albus, certain strains of pneumococci, and many other organisms habitually inhabit the upper respiratory tract and invade the tissue when the resistance of the human organism is lowered from any other disease condition. They give rise to various types of localized purulent infections such as tonsillitis, otitis media, sinusitis, bronchitis, and even pneumonia. Most usually their secondary invasion pathway is paved by the virus infection which has had developed a predilection for certain tissues of the upper respiratory tract. Their invasion produces toxemia, more fever, and a lowering of the resistance of the human organism. These secondary invaders must, therefore, be controlled.

Penicillin and the sulfa derivatives have proven most effective. Personally, I have elected to use penicillin because it has been most effective and is without the reaction and depressive effect of the sulfa derivatives; and also because the sulfa derivatives have been proven to have no effect over the virus organism, whereas no such proof has been demonstrated against penicillin.

Ten thousand units should be injected deep intramuscularly in the baby every four hours for a minimum of twelve injections, and continued as long as fever or symptoms persist. Forty thousand units are injected intramuscularly in the adult in the same manner. Dosage is adjusted in accordance with age and weight.

These are the two therapeutic procedures which I have used to stop the virus infection in the first and second stage of polio, and prevent the third stage of complication—the infantile paralysis. The supportive treatment and nursing care is designed in accordance with the prevailing symptoms. Should the patient be seen in the third and complicating stage of infantile paralysis there remains only the very effective Kenny treatment.

There is only one criterion in adopting and applying this therapeutic procedure in controlling polio and preventing the complications of paralysis—*the presence or absence of a polio epidemic.*

During a polio epidemic every child or young adult who develops an unexplained fever, whether or not there is any evidence of a possible polio infection, should immediately be administered these two therapeutic procedures. There is no other known "preventive polio" procedure and its application is simple, economical, and completely devoid of any reaction or deleterious after-effect.

CONCLUSIONS

1. A pleomorphic streptococcus exists which, in its life cycle of changing forms, one of which is ultramicroscopic or virus in form, gives rise to different symptom-complexes which we know and recognize as common cold, influenza, lethargic encephalitis, anterior poliomyelitis and its complication of infantile paralysis, and herpes zoster in its various forms.

2. This organism in all its pleomorphic forms exists in the upper respiratory tract and is spread by open coughing, sneezing, or spitting by infected individuals or carriers.

3. The particular form which is known as anterior poliomyelitis and its complication, infantile paralysis, exists in three stages, the first of which is extremely capricious in its symptomatology and impossible of diagnosis; the second of which is marked with mild or severe central nervous system irritation—notably positive Kernig sign and opisthotonos; and the third stage, which is the stage of localization in the anterior horn cells, with residual of infantile paralysis—flaccid, lower motor, neuron type.

4. The specific virus form is subdued by intramuscular injections of the patient's own blood.

5. The secondary invaders are best combated by intramuscular injections of penicillin.

6. The third stage of paralysis is prevented if these two therapeutic procedures are started in the first or second stages of polio.

7. The criterion in adopting and applying this therapeutic routine in controlling polio and preventing the paralysis is the presence of a well established polio epidemic.

8. During a polio epidemic every child or young adult who develops an unexplained fever or whether there is any suspicion of polio infection, and particularly when leukopenia is present, should immediately be administered these two therapeutic procedures.

9. This procedure is rational because there is sufficient evidence both clinical and that presented in the medical literature over the last fifteen years to support this concept, and particularly because there is no other "preventive polio" procedure in existence, and also because it is simple, economical, and completely devoid of reaction or deleterious after-effect.

IMPORTANT RECENT DEVELOPMENTS IN LABORATORY MEDICINE

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Laboratory aids in diagnosis, treatment and prevention of disease are being constantly introduced and perfected. Yet the practicing physician has hardly the opportunity to follow the rather technical literature dealing with laboratory procedures.

A progressive laboratory will employ many innovations automatically. The search for tubercle bacilli in sputa for instance will often be conducted with the aid of the fluorescense microscope whether or not this procedure is specifically requested. Other tests, however, must be known to the physician if they are to be employed. If the physician is not acquainted with the significance of the R*h* factor, or of the prothrombin time, he will not avail himself of these tests. In these instances, the laboratory can be only as progressive as the physicians it serves.

Practitioners therefore ought to be given periodic accounts of new or improved laboratory methods useful to them. The practical application of the procedures should be dwelt on while technical details may well be dispensed with. In the following, important laboratory methods developed during the past few years will be thus presented.

R*h* Factor Determination and Its Clinical Application

The R*h* factor is found in the red blood cells of 85 per cent of the population, who are therefore R*h* positive. The remaining 15 per cent are R*h* negative. Normally, there are no substances in human serum which will react with the R*h* factor and will destroy R*h* positive red blood cells. Under certain circumstances, however, R*h* negative individuals may develop an "anti-R*h*" substance which will destroy R*h* positive red blood cells.

Erythroblastosis fetalis.—An R*h* negative woman is likely to have an R*h* positive husband since 85 per cent of the population are R*h* positive. To be R*h* positive is a dominant hereditary trait. The child of an R*h* negative mother and an R*h* positive father is therefore likely to be R*h* positive. The R*h* negative mother, carrying a R*h* positive fetus, is sometimes slowly sensitized against R*h* positive blood. She will develop an "anti-R*h*" substance which passes through the placenta into the fetus and destroys its red blood cells. These R*h* positive children of R*h* negative mothers may then develop erythroblastosis fetalis. They may be born dead or may present, either at birth or shortly afterwards, jaundice, rapidly progressive anemia and hemorrhagic manifestations.

While many infants with erythroblastosis fetalis used to die, they can now often be saved by instantaneous transfusions of properly selected blood. As soon as the disease is suspected, the R*h* factor should be determined in mother and child. In 90 per cent of the cases of erythroblastosis fetalis the mother will be R*h* negative and the child will be R*h* positive. In the remaining 10 per cent, mother and child may both be R*h* positive but the mother will belong to another "sub-type" of R*h*. She may then develop a substance destroying the strange "sub-type" of R*h* of her child though she is herself R*h* positive. Even in such atypical instances, the laboratory can often demonstrate the destructive action of the mother's serum on the child's cells and thereby furnish the diagnosis.

Transfusions of infants with erythroblastosis fetalis may be very urgent since their red cell count may drop in a few hours by several millions. It must be borne in mind that the infant, though R*h* positive, has in its blood a substance destroying R*h* positive cells. It is therefore necessary to transfuse R*h* negative blood from an individual who has not been previously sensitized against R*h* positive blood. Since only 15 per cent of the population are R*h* negative, such blood may be difficult to find. R*h* negative donors should therefore be available on short notice for this emergency, and for others which will be discussed subsequently. If, however, R*h* negative donors cannot be secured, the washed cells of the mother may be transfused. The washing of these cells in several changes of physiological saline removes the plasma with its harmful "anti-R*h*" substance while the R*h* negative cells of the mother will survive in the child.

Transfusions during pregnancy, labor and puerperium.—Pregnancy may cause R*h* negative women to develop a substance destroying R*h* positive blood. If such sensitized women need a transfusion during pregnancy, labor

or puerperium, they are likely to receive R*h* positive blood since 85 per cent of the donors are R*h* positive. Transfusion of R*h* positive blood will result in a hemolytic transfusion reaction which may prove disastrous in an already debilitated patient. To avoid such reactions, the R*h* factor should be determined and R*h* negative blood should be used for R*h* negative patients. Since women may retain a sufficient amount of "anti-R*h*" substance even years after sensitization through pregnancy, it may be advisable to determine the R*h* factor prior to transfusions of all women with a history of previous pregnancy, and especially when a child was born dead. If R*h* positive blood is to be used in such R*h* negative patients, a trial injection of 50 cc. of blood should be given. Samples of the patient's serum obtained before this injection and again one hour following it, should be compared. If hemolysis has occurred, the second sample will be darker and will show a higher icteric index. This would indicate that the patient destroys R*h* positive blood.

Repeated transfusions.—An R*h* negative woman may be sensitized against R*h* positive blood through an R*h* positive fetus. She may have a hemolytic reaction with the first transfusion of R*h* positive blood. Yet any R*h* negative individual may at some time receive a transfusion which is likely to consist of R*h* positive blood. This first transfusion, though borne without reaction, may sensitize this individual so that a second transfusion will then be accompanied by a hemolytic reaction. It is therefore advisable to determine the R*h* factor in any individual who has received a previous transfusion. If found to be R*h* negative, this patient should receive R*h* negative blood unless first tested out with R*h* positive blood as described.

The R*h* factor plays therefore an important role in pregnancy and transfusions. Its importance for mother and child is so great that the R*h* factor should probably be determined routinely during pregnancy. If the mother is R*h* negative, danger may be anticipated for the child and also for the mother, should she need a transfusion. A selection of suitable donors may then be done in time to be ready for any emergency.

It must be stressed that the cross-matching test employed prior to transfusions for the detection of incompatible blood does not usually show any abnormality in cases of R*h* incompatibility. Severe reactions may therefore occur in spite of a successful cross-matching. This danger can be avoided through determination of the R*h* factor in the situations outlined above. R*h* negative blood should then be used for the R*h* negative patients who might be sensitized unless their reaction to R*h* positive blood is first tested carefully.

To recapitulate: the patients requiring R*h* negative blood are infants with erythroblastosis fetalis, R*h* negative women who have been sensitized through a R*h* positive fetus, and any R*h* negative individual who has been sensitized through a previous transfusion of R*h* positive blood.

PROTHROMBIN TIME

This test is valuable in conditions where the blood clotting mechanism is disturbed and hemorrhage has occured or must be anticipated.

A low prothrombin level with hemorrhagic manifestations may result from a deficiency of the "anti-hemorrhagic" vitamin K which is essential for the formation of prothrombin. The presence of bile salts in the intestine is needed for the absorption of vitamin K. With obstructive jaundice or biliary fistula, the absorption of vitamin K is therefore interfered with, the prothrombin level drops dangerously and hemorrhagic manifestations may appear. The pre-operative restoration of an adequate prothrombin level through administration of vitamin K has greatly reduced the danger of surgical hemorrhage in jaundiced patients.

Hemorrhagic disease of the newborn shows a low prothrombin level. Sprue, ulcerative colitis and other diseases interfering with intestinal absorption of vitamin K may lead to low prothrombin values. Injection of vitamin K is indicated.

Prothrombin is formed in the liver and is diminished in diseases damaging the liver parenchyma such as acute yellow atrophy or chloroform poisoning. These cases are not benefited by vitamin K.

A normal prothrombin time with Quick's method is 12 to 20 seconds. A reduction in the prothrombin level results in a lengthening of this time.

DIAGNOSIS OF SHOCK

Shock is a serious complication of a number of conditions as hemorrhage, traumatic injuries, burns, operations, intoxication from metabolic and bacterial diseases and drugs, serum disease, acute abdominal conditions, such as perforation, obstruction, peritonitis and pancreatitis, coronary thrombosis, and many others. The early recognition of shock followed by immediate treatment will often prove life-saving. The drop in blood pressure is a late and ominous sign. Hemoconcentration however may be demonstrated early.

Hemoconcentration is a thickening of the blood with relative preponderance of the red blood cells. It is caused by the escape of plasma from the blood into the tissues. Hemo-

concentration can be determined with the hematocrit by measuring the relative volume of the red blood cells in a sample of blood. The red blood cells constitute normally from 40 to 50 per cent of the blood volume in men and from 37 to 45 per cent in women. In shock, there is a sharp increase in the relative volume of the red blood cells.

The "falling drop" densiometer allows a speedy diagnosis of hemoconcentration. The specific gravity of a drop of blood is measured. The loss of plasma in shock increases the specific gravity of the blood.

BONE MARROW STUDIES

The examination of the bone marrow may be valuable where diseases of the hematopoietic system are considered and where a diagnosis can not be made on the basis of the clinical features and the study of the peripheral blood. The marrow is obtained from the sternum. Aspiration through a large-bore needle with local anesthesia is a simple procedure. Removal of a small piece of bone and marrow with a trephine is more difficult but yields a superior specimen which may be embedded in paraffin and sectioned to show the marrow cells in their natural relationship and distribution.

Changes in the number and relative proportion of the marrow cells may be diagnostic in leukemias, in aplastic anemia and in other blood diseases. Aspiration of characteristic cells has led to the diagnosis of carcinomatosis, myeloma, miliary tuberculosis and other conditions.

ENDOCRINE STUDIES

The identification and assay of hormones has developed apace with the advances of clinical endocrinology. Though some examinations are too complex for the average clinical laboratory, others are simple, reliable and useful and should be adopted.

Gonadotropic hormone, produced by the anterior pituitary, is also elaborated in large amounts by the placenta during pregnancy and by some tumors, notably the chorionepithelioma and the teratoma testis. It will disappear from the urine with the removal of such tumors, only to recur as metastases develop.

Failure of the estrogenic hormone to appear in the urine of mature females indicates insufficient function of the ovaries. A persistently high level is found with granulosa cell tumor of the ovary.

An endometrial biopsy, taken shortly before menstruation, may reveal that the ovaries failed to ovulate, a possible cause of sterility. Abnormally low and high estrogen levels will also be recognized by the appearance of the endometrium.

MISCELLANEOUS TESTS

Elevation of serum phosphatase is important in the differential diagnosis of certain neoplastic and inflammatory bone lesions. The return of the phosphatase values to normal corresponds with the rate of healing in active rickets. Since the phosphatase is elevated in obstructive jaundice, normal values mediate against common duct obstruction as the cause of jaundice. Normal values are 1.5 to 4 Bodansky units in adults and 4 to 14 units in children.

The elevation of the phosphatase with obstructive jaundice is not diagnostic of the latter condition since elevation may also accompany hepatogenous jaundice. A valuable reaction for the differentiation of obstructive and hepatogenous jaundice has however been developed in the cephalin-cholesterol flocculation test. Flocculation occurs with hepatogenous jaundice.

The iso-iodeikon test of liver function is useful in the estimation of the surgical risk in gallbladder and bile duct disease. If 50 per cent or more of the injected dye are retained, surgery is contraindicated until the liver function has improved. This regime has resulted in a considerable reduction of the mortality rate.

The sedimentation rate has been shown to be helpful in following the progress of atypical pneumonia. It is elevated in the acute stage, returns to normal with improvement and rises again with relapses. There are many other valuable uses of the sedimentation rate: in rheumatic fever, tuberculosis and myocardial infarct, to mention only a few.

CONCLUSION

This summary of recent advances in laboratory medicine is of necessity incomplete, covering merely what seemed the high spots to the writer. But let the clinician remember that it is the pathologist who is acquainted with the useful laboratory methods, both old and new. Much may be gained by consultation with the pathologist in questions of diagnosis and treatment. His services however do not seem adequately utilized in the average hospital. Yet it is apparent that with the increasing importance, but also mounting diversity and complexity of laboratory medicine, the practitioner will find it more and more difficult to use the facilities of the laboratory unaided. The need for the pathologist as a clinical consultant will become increasingly apparent though it is quite definite now. Progressive physicians should have no regrets if they have developed the habit of utilizing the pathologist's services for clinical consultation.

GLYCOGEN STORAGE DISEASE

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The conception of glycogen disease as a metabolic disorder was first developed by von Gierke in 1929. It is characterized by abnormal accumulation of glycogen in various organs. Two distinct clinical types of the disease have been defined: (1) the hepatonephromegalic type, the liver being the principal organ involved, and to a lesser extent, the kidneys; and (2) the cardiomegalic type, characterized by glycogenic enlargement of the heart.

Since the publication of von Gierke's important observations, a number of reports have appeared in the literature during the last decade conforming to the disease picture as originally described; among them there have been about 10 cases reported in this country. In view of the rarity of this disorder, it appears to be of value to add another case report of glycogen storage disease. Furthermore, it seems likely that the study of the condition will add materially to our meager knowledge of the physiology and still vaguer concepts of the pathology of carbohydrate metabolism and will increase our insight into several other diseases of childhood.

CASE REPORT*

C. H., a 3-year-old white girl, was admitted to Texas Children's Hospital in Dallas on April 2, 1942, with the chief complaint of abdominal swelling. She was born of healthy parents after a normal pregnancy and labor. Two siblings are living and well. There had been no familial diseases. The neonatal period was normal. The infant was breast fed one month; then an artificial formula was given for one year. Soft solids were allowed at 3 months. She sat at 5 months, had the first tooth at 7 months, walked at 16 months. She had always been reluctant to play actively. The appetite was poor; she craved sweets and bread.

Present Illness: The mother first noticed that the child's abdomen was becoming prominent at the age of one year. This swelling had slowly increased. There was no jaundice, abdominal pains, hematuria, abnormal stools, chills, fever, *et cetera*. The child was brought to the hospital because of the fact that of late the abdomen had become larger.

Physical Examination: The temperature was 99.6 F., pulse 120, respiration 36, blood pressure 94/62, weight 34½ pounds, and height 37¼ inches. The child was of small frame, fairly well nourished, not appearing ill, alert and cheerful. The skin was of normal texture and color, the head of normal size and shape, and there were no skeletal deformities. The eyes, ears, nose and throat and teeth were normal. Examination of the lungs, genitals, and extremities was negative, and neuromuscular examination gave normal findings. The left border of the heart was in the midclavicular line. The rate and rhythm were regular; there were no murmurs, nor abnormal pulsations.

The abdomen was visibly enlarged, measuring 26 inches around the largest part. Superficial veins were slightly prominent. The liver border extended down to the right iliac crest, going up toward the left about 0.5 cm. below the umbilicus and disappearing under the costal arch at about the left axillary line. The surface was smooth, and the edges round; there was no tenderness, nor signs of fluid. The spleen was not palpable.

Laboratory Findings, as reported by Dr. Gladys Fashena, Director of Laboratories, were: The urine obtained while fasting was negative for sugar, albumin and bile, and microscopically, but was positive for acetone. Schick, Mantoux and Wasserman tests were negative. The sedimentation rate was normal. The hemoglobin was 89 per cent (11.7 G m.); red blood cells, 3,300,000; leukocytes, 7,300; segmented forms, 23; band forms, 2; lymphocytes, 70; monocytes, 1; eosinophiles, 3. The stools were of normal color and consistency; no parasites or ova were found. The basal metabolic rate was normal.

X-ray study showed no enlargement of the heart. The skull and sella turcica were within normal limits. The long bones were essentially normal. The fasting blood sugar checked on ten different occasions was never higher than 50 mg. per cent and as low as 34 mg. per cent, the average being 42 mg. per cent. At the same time the blood cholesterol was never lower than 221 and in some instances was as high as 324, the average being 284.

	Glucose Tolerance Test Blood Sugar	Galactose Tolerance Test Blood Sugar
Fasting	44 mg. per cent	40 mg. per cent
½ hour later	190 mg. per cent	140 mg. per cent
1 hour later	274 mg. per cent	138 mg. per cent
2 hours later	264 mg. per cent	104 mg. per cent
3 hours later	264 mg. per cent	114 mg. per cent

After ingestion of glucose, no sugar was excreted. After ingestion of galactose, only a faint trace was excreted in the urine. After injection of adrenalin, there was a very slight elevation of the blood sugar from 43 mg. per cent to 49 mg. per cent, but a marked increase of the ketones in urine occurred.

Excretion of diastase in a 24-hour specimen of urine was 34 units. The urea nitrogen was 14.5; the carbon dioxide combining power was 44.5; plasma protein, 7.6; albumin, 5.9; globulin, 1.7; icterus index, 10; phosphatase, 6.3 units; calcium, 9.29; blood diastase, 12 units; serum lipids 2223.

The glycogen content of the blood (Somogri) was 26 mg. per cent, with Van Crefeld's method, which is a definite increase.

Course in Hospital: A diagnosis of von Gierke's disease was made after admission and the patient was kept in the ward so that the disease could be further investigated. Several transfusions were given because of anemia. Using the size of the abdomen and chemical determination of fasting sugar and cholesterol as a guide, therapeutic efforts were made with courses of vitamin B complex, lipocaic and then pancreatin. No change was noted. The patient was discharged on the eighty-sixth day. Two years later the child was readmitted because of frequency of urination, urgency and burning. She had gained from 34.5 to 48.5 pounds, and was in good general condition, small for her age, and possibly slightly retarded mentally. The enlargement of the liver and all the laboratory findings pertaining to glycogen disease were unchanged. The urinary symptoms cleared up rapidly and the child was sent home after five days on March 6, 1944.

Symptomatology. — The most important symptoms in the hepatic type of glycogen

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Read before the Section on Pediatrics, State Medical Association of Texas, Fort Worth, April 20, 1944.

*The author is indebted to Dr. Peter Kaminski, formerly Associate Resident at Texas Children's Hospital, Dallas, under whose care this case was studied.

storage disease, all of which were present in the case here reported, are:

1. Enlargement of the abdomen due to early hepatomegaly.
2. Carbohydrate hunger.
3. A combination of hypoglycemia with acetonuria in the fasting condition.
4. Absence of a distinct elevation of blood sugar and marked increase of ketosis following injection of adrenalin.
5. An abnormal curve in the dextrose tolerance test.
6. Normal tolerance of galactose.
7. Hypercholesterolemia and lipemia.
8. Increased blood glycogen values.
9. Low blood diastase and increased urinary diastase values.

Differential Diagnosis.—The cardiac type of glycogen disease requires differentiation from congenital heart disease, pneumonia, and pleurisy with effusion. The hepatic type must be differentiated from all other conditions in which an enlargement of the liver is a common symptom, such as cirrhosis of the liver, congenital fatty liver, the reticuloendotheliosis group, parasitic diseases of the liver, neuroblastoma with extensive liver metastases and diabetes mellitus.

Etiology.—A disturbed metabolic process undoubtedly is the fundamental cause of the disease. It is most probably of congenital origin. Seckel and Kato found that in newborn rats and for the first two weeks of postnatal life, the liver is poor in glycogen content, but after the third week of the hepatic cords begin to show the presence of glycogen deposits. In von Gierke's disease, the liver apparently contains enormous amounts of glycogen even during the intrauterine life.

Pathogenesis. — The pathogenesis of glycogen disease is still poorly understood. There are two main conceptions:

1. Enzyme anomalies.—The original theory that the widespread deposit of glycogen is due to a lack of amylase, was later disproved by Unshelm, who demonstrated the presence of this enzyme in the liver. No consistent proofs are available in support of the colloidal theory (Lesser), the cell-adsorption theory (Hertz), and the abnormal compound of glycogen theory (Kimmelstiel). In a recent study, Mason and Anderson place the fundamental defect in glycogen disease in the enzyme system of the liver.

2. Considering the results of new investigations on the influence of hormones, especially of the pituitary and the adrenal cortex, upon carbohydrate metabolism, another point of view is the possible relationship of glycogen disease to some endocrine dysfunctions. Clinically, a certain number of patients with glycogen disease exhibit other signs of endocrine disorders; chemically the combination picture of hypoglycemia, abnormal blood sugar curve, sensitivity to small amounts of insulin, markedly decreased adrenalin hyperglycemia and spontaneous acetonuria point undoubtedly to the possibility of pituitary anomaly. Although in our case, like in most reported cases, the roentgenogram of the sella turcia was within normal limits, we agree with Van Crefeld, who stated that a hypoactivity of the anterior lobe of the hypophysis or of the tuberculum cinereum seems to offer an adequate explanation of many of the symptoms observed in glycogen disease.

Treatment.—No specific therapy is available. On the assumption of the presence of endocrine disturbances in patients with glycogen storage disease, thyroid, pituitary, gonadotropic substances and epinephrine have been tried with variable results. The administration of choline has been suggested, and the use of bile salts recommended. Roentgen therapy is of little value. A high carbohydrate low fat diet seems to be best suited to combat hypoglycemia and acetonuria.

Possibly future discoveries in the field of endocrinology will provide us with a specific therapy of glycogen storage disease.

REFERENCES

1. Litchfield, H. R., and Dembo, L. H.: Therapeutics of Infancy and Childhood, Philadelphia, F. A. Davis Company, vol. 3, p. 2279, 1942.
2. Mason, H. H., and Anderson, D. H.: Glycogen Disease, Am. J. Dis. Child 61:795-825 (April) 1941.
3. Mury, J.: Le syndrome de von Gierke (glycoginose) Ann. paediat. 158:177-215, 1942.
4. Van Crevald, S.: Glycogen Disease, Medicine 18:1-128 (Feb.) 1939.

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ORAL PENICILLIN THERAPY

Three Washington, D. C., research scientists combined penicillin with certain aluminum or magnesium compounds and discovered a method whereby the drug could be taken by mouth with effective results for the treatment of various diseases.

Henry Welch, Ph. D., Clifford W. Price, A. B., and Velma L. Chandler, B. S., report in the July 21 issue of *The Journal of the American Medical Association* that the administration by mouth of "four doses of 25,000 units each two hours apart of penicillin modified by either aluminum hydroxide or magnesium hydroxide will result in a prolonged level of penicillin in the blood stream.

"Following each dose," the investigators say, "there is a pronounced increase in the blood concentration level of penicillin, and this blood level may be increased with subsequent doses. Relatively high levels of penicillin may be maintained in blood by increasing the frequency of the doses of penicillin-aluminum hydroxide."

They conclude that because of the prolonged penicillin concentrations in the blood following this method of administration by mouth, this dosage form may have some definite preventive value in disease.

COLLEGE OF PHYSICIANS OF PHILADELPHIA

ORIENTATION OF PRIVATE PRACTICE AND PUBLIC HEALTH

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When the energies of the people are again diverted from war to the pursuits of peace, the impetus will be strong to do for purposes of social experimentation what has been learned to do for purposes of war. Initially embellished to political end the trend toward complete social security will be accelerated unfettered by lack of course or destination. To achieve the ultimate of social security a planned economy is required; the planned economy necessitates arbitrary directorship, and individual liberty will be sacrificed for the promise of freedom from necessity, and the war to free man from man will have been for naught. Health is included in the objectives for security of a given standard of life, and we, citizens and physicians, are therefore doubly concerned.

Security is an obligation of society, but to retain the democratic pattern this security must not jeopardize the individual incentive. The guarantee of a minimum of food, shelter, and clothing sufficient to preserve health is just, and feasible in and compatible with the democratic state. Security of the kind that promises protection against diminution of a given standard of living regardless of the individual's own effort endangers the general freedom and eventuates in the need for dictation. In the socio-economic evolution the program for health must be in harmony with that plan of security which is not inimical to the democracy.

The subject of health is multi-faceted and has been disarrayed, maliciously and unwittingly, to the end of confusing and dividing those who by virtue of education and experience are best able to offer counsel. From the camp of public health physicians comes a plan for a curative medical service program while from the practitioners, looking askance at public health as an annoying intruder, we learn how by our curative art life expectancy has been benevolently extended. Inadequate medical care because persons are unable to pay the costs of services on an individual payment basis is, in a measure, accepted by practitioners as evidenced by our preoccupation with prepayment plans to the exclusion of consideration of other facets in the problem.

The caterwaul has succeeded in screening the facts that the poor have more illness by virtue of a combination of lowered vitality and a tendency to delay seeking medical care. The fault is, by and large, socio-economical and educational. With provision for a minimal sustenance compatible with health and a wider dissemination of proper health information directed by public health physicians, the needs for curative medicine by those among whom the inequities of curative medicine appear greatest, will be diminished.

The aims of public health endeavor and curative medicine are common, the human welfare; and their respective functions are interdependent and subservient. The practitioner's concern is the best interest of the individual, the interest of human welfare in the aggregate; the public health physician's functions relate directly to consideration of community welfare, where the self-interest of the individual stops, and the rights and protection of others begins. The concern of the former is personal health, of the latter public health—both practice preventive medicine, the practitioner as a part of his personal professional service, the public health physician in part by the dissemination of information which incites health interest in the individual and arouses him to seek aid from a qualified practitioner. Health education, properly directed, is the plausible answer to charlatanism.

Additional indispensable functions of preventive medicine by the public health physician, outside the scope of the private practitioner, include: registration, analysis and interpretation of facts of births, deaths, and sickness; control and prevention of communicable diseases; provision of a public health laboratory; and protection of human reproduction and replacement. Within these principles there is no cause for conflict in function between private practitioners and public health physicians, but unequivocally good reason for harmonious cooperation to the mutual benefit of both and for the good of society.

There should be added to "the principle that the care of the public health and the provision of the medical service to the sick is primarily a local responsibility" (from the platform of the American Medical Association), that it is the obligation of the local medical profession to insure acceptance of these responsibilities by the local governments. The positive public relations value of such function was recognized by the late Dr. S. L. Smith in an address delivered on October 14, 1902, before the San Angelo District Medical Society in which he said:

"The general public look upon the organization for a medical society as inimical to their interests and entertain the belief that it exists for the pecuniary advancement of its members, just as all amalgamated associations and trade unions do for working men, and we must endeavor to correct this impression by advocation of sanitary reform, the purification of our water supply by filtration, the building of a county

Chairman's address prepared for the program of the Section on Public Health, State Medical Association of Texas, at Galveston, May 8-10, 1945, cancelled because of war conditions.

hospital for the reception of the invalid poor, and such other questions of professional and public interest as may from time to time be suggested."

The adequacy of public health endeavor in a community is dependent upon sponsorship by the local medical profession of proper public health effort. Such effort to be effective must be something more than the part-time and secondary preoccupation of a busy practitioner who, for a nominal fee, is able to render only nominal services. A pattern for local health service under qualified medical leadership for communities of 50,000 population or more has been accepted by the public health profession, and was unanimously endorsed by the House of Delegates of the American Medical Association in 1943. Forty-eight local full time health units of this pattern have been established in Texas under the direction and guidance of our State Health Department. There is need, according to the State Health Department estimation, for establishing thirty-two more. Despite war-time difficulties of procuring sufficient properly trained personnel, the accomplishments of the local health units affiliated with the Texas State Department of Health, have been exemplary. Everywhere these units have functioned in the best interest of the public health and to the credit of the sponsoring medical societies.

In the best interest of public welfare and the best interest of the Texas medical profession, it behooves the House of Delegates of the State Medical Association of Texas to urge the Trustees to "employ all appropriate resources and influences of the Association to the end that at the earliest possible date, complete coverage of the 'population of the State' by local full-time health services be achieved." The medical profession will find it prudent to cooperate freely with these units, not to arbitrarily divorce public health from private practice but to make a conscious effort towards the integration of personal and public health endeavors so that both may be better appreciated, medical public relations abetted, charlatanism suppressed, the general welfare benefited, and so that a program for health consistent with democratic principles may prevail.

An equitable labor policy must be established for those found to be tuberculous if the control program for this disease is to have permanent success. It has been found that health committees of labor unions are sympathetic to this type of health activity if they are informed of the full implications of the presence of a communicable disease in a fellow worker. A sick worker is a liability to himself, his family and his union, not to mention the industry and the community. When these facts are presented in their true light, rarely has there been difficulty in obtaining full coöperation.—Herman E. Hilleboe, M. D., and D. M. Gould, M. D., J. A. M. A., May, 1944.

VENEREAL DISEASE CONTROL IN CAMP BOWIE

MAJOR GEORGE A. GRAY, M. C., A. U. S.

It is doubted that venereal disease control in Camp Bowie has been vastly different from that elsewhere. The same or similar difficulties have prevailed; and, in general, the usual methods of control have been employed. However, it is thought that a review of these methods and an elaboration on individual factors involved in carrying them out may be of interest.

The contact history has been the starting point of the entire control procedure. An effort has been made to get the full confidence and coöperation of patients in getting on the record all they knew about their contacts. To do this, considerable experience and aptitude on the part of the one taking the history are necessary. The enlisted man now taking these histories has been so employed for nearly two years. He is very patient and has a good understanding of human nature. He takes the patient into a private office and first explains that any information given is held in the strictest confidence, that only his serial number goes on the history sheet, and that even the public health nurse who visits the contact will not know his name or his organization. It is also explained to the patient that he can help his fellow soldiers and the war effort in general by giving the information necessary for getting the contact under treatment. He is made to understand that not only is he not doing the contact any wrong, but is actually helping her by reporting her disease.

When either name and complete address, the full name and name of city and state, or the given name or nick name, and place of employment, together with the personal description are obtained on the contact history, it is thought that the public health nurse or investigator has a reasonable chance of locating the contact. Based on these criteria, 49.2 per cent of the Camp Bowie histories for the past three months have been satisfactory. This may seem to be a low percentage. But it is believed that a little experience in getting from the enlisted man information which he considers strictly within the scope of his own business and not that of anyone else, will convince anyone that 49 per cent of worthwhile histories is not bad.

Following the close of each four or five-week period, a summary of the data obtained on the contact histories is arranged in outline form on a single legal sized sheet, as shown

in figure 1. This outline gives any interested person at a glance the entire venereal disease picture for the period. It also enables the venereal disease control officer, after brief study of the chart, to see exactly where his problems are. If the "Geographical Distribution of Sources" indicates that an unusually high percentage of cases were contracted in a certain city, the control officer can approach the officials of that city with definite, easily understood information on which to base his requests for corrective measures. He has comparative data from month to month that show without question the trend of events.

Since July, 1942, 29.54 per cent of Camp Bowie venereal disease cases have obtained their infections locally, the highest percentage for any one period being 60 and the lowest

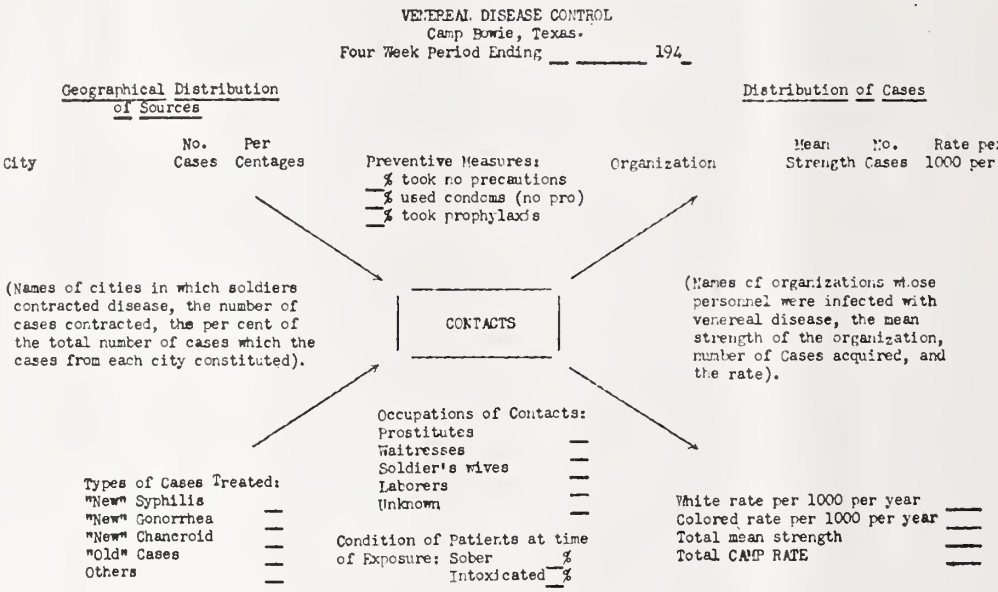
VENEREAL DISEASE CONTROL
Camp Bowie, Texas.
Four Week Period Ending __ _____ 194_
Geographical Distribution of Sources
City
No. Cases
Per Centages
Distribution of Cases
Organization
Mean Strength
No. Cases
Rate per 1000 per year
Preventive Measures:
__% took no precautions
__% used condoms (no pro)
__% took prophylaxis
(Names of cities in which soldiers contracted disease, the number of cases contracted, the per cent of the total number of cases which the cases from each city constituted).
CONTACTS
(Names of organizations whose personnel were infected with venereal disease, the mean strength of the organization, number of Cases acquired, and the rate).
Occupations of Contacts:
Prostitutes
Waitresses
Soldier's wives
Laborers
Unknown
Types of Cases Treated:
"New" Syphilis
"New" Gonorrhea
"New" Chancroid
"Old" Cases
Others
Condition of Patients at time of Exposure: Sober __%
Intoxicated __%
White rate per 1000 per year
Colored rate per 1000 per year
Total mean strength
Total CAMP RATE

FIGURE 1.—Outline used for summarizing the venereal disease situation for each four or five-week period.

17.46. The health unit director is constantly kept informed of the number of cases acquired in his jurisdiction, and if he does not, or cannot, make the requested corrections, this fact, together with appropriate recommendations, is brought to the attention of the Surgeon, who directs any further action.

Figure 2 shows the relationship which the Camp Bowie V. D. Control Officer, working under the Camp Surgeon, has sought to maintain with civilian agencies and other military personnel. The principal approach to civilian authorities has been through the health unit director. There have been a few instances in which the control officer has accompanied the director to see other city and county officials merely to aid the director, and not to take a leading part in the interview.

A close working relationship has been maintained with the provost marshal, who likewise works in full coöperation with the sheriff and chief of police. During this emergency, police work has been important in the prevention of venereal disease, because normal public health methods have proved inadequate in properly handling irresponsible transient girls. When girls are not apprehended before sufficient time has elapsed for infected soldiers to name them in a contact history, they have not only infected many other soldiers, but too often they have moved on to the next camp. That the quarantining of persons suspected of having venereal disease has proved effective in lowering the Camp Bowie rate has been demonstrated. In the autumn of 1942 and also in 1943, following a rise in the rate each year, law enforcement officials launched campaigns against prostitution, with the results that the rate was lowered appreciably in each instance.

In the "Distribution of Cases" (Fig. 1) the organizations having the highest rates are placed at or toward the top of the list. The surgeons of those organizations are visited and given suggestions as to how they may lower their rates. The control officer furnishes the surgeons with posters and other material which they may post or use in their lectures to the men, and he often lectures to the men himself, when invited to do so by the surgeons or commanding officers.

All facts and figures used in the lectures are given as much local color as possible. For instance, they are told that only 16 per cent of the venereal disease patients treated in Camp Bowie Station Hospital for twenty months past, had taken a prophylaxis after their exposure. Twenty-one per cent of them

used condoms but took no prophylaxis, and 63 per cent took no precaution whatsoever. When this 84 per cent (21 per cent plus 63 per cent) were questioned as to why they, knowing that prophylaxis properly taken prevents venereal disease and knowing the seriousness of such disease, did not take a prophylaxis, almost all their answers fell into one of three groups: The first group said that they were drunk or drinking, and little realized what they were doing. Those of the next largest group said they were on an all night or a week-end party, and it was entirely too inconvenient to take a prophylaxis after each exposure. Those of the third group said their contacts were with girls whom they *knew* to be all right and had not felt that a prophylaxis was necessary. The men are also given the information that of the patients seen during the above mentioned period, 51 per cent of them were more or less intoxicated at the time of exposure, according to their own admission.

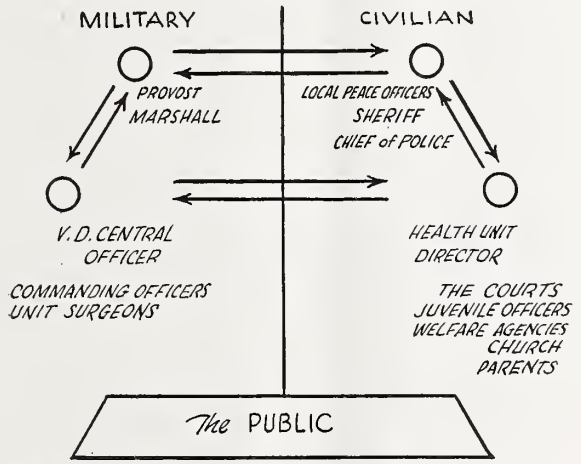

FIGURE 2.—Relationships maintained by the venereal disease control officer with civilian and military authorities. All are dependent upon public opinion for a successful program.

In these lectures, no effort is made to scare the men. Rather, their intelligence and sense of proportionate values is appealed to with the above mentioned and other factual data, gathered to as great extent as possible under local conditions. Although scientific facts are given briefly, the didactic recitation of signs and symptoms of venereal disease is thought to be intensely boring to the average enlisted man. It is emphasized that it is just as important for the soldier to know how to protect himself against venereal disease as it is for him to have knowledge of how to protect himself against air attack, bullets, gas, and other hazards. The Army training films and Public Health Service films on venereal disease prevention are, of course, shown along with these lectures.

Included also in the chart (Fig. 1) are white, Negro, and total camp rates, the total number of cases treated in this Station Hospital during the period, whether included in the rate or not, and the occupations of contacts. Unfortunately, it has been necessary to classify the most of them as having unknown or no occupation, but it may safely be assumed that nearly all of those so classified were prostitutes.

The control officer closely supervises a prophylaxis station for white and one for Negro military personnel in the City of Brownwood. The attendants are well trained and are required to maintain properly prepared, fresh solutions for use in giving the prophylactic treatments. Prophylaxis facilities are also maintained in all dispensaries in camp. Individual prophylaxis kits, with and without condoms, are stocked by all Camp Bowie exchanges, and are offered for sale only by male clerks. Also, many of the organizations purchase these kits in quantity with organization funds and make them available to the men. Sulfathiazole by mouth has not been used as prophylaxis in Camp Bowie.

Numerous routine examinations of soldiers for venereal disease are made as a result of requests by civilian health departments. Others are examined because their wives or other contacts have been found by the outpatient service to have venereal disease, or because they were found by the military police in hotels or tourist camps with women suspected of having such disease.

SUMMARY

Good contact histories are essential in the conduct of an effective venereal disease program.

An outline is suggested for assembling on one page all pertinent venereal disease data for any given period. A glance at this outline gives a complete picture of the situation.

Surgeons of organizations with high rates are aided by the venereal disease control officer in lowering those rates by furnishing them posters and statistics designed to show the men why venereal disease should be prevented and how it can be done.

The control officer's principal contacts are with the local health director and the provost marshal. Emphasis is placed upon the importance of police work and quarantine in prevention of venereal disease during this emergency on account of the large number of transient girls.

Adequate prophylaxis facilities are maintained, both in camp and in the nearby municipality.

MISCELLANEOUS

COMING MEETINGS AND CLINICS

State Medical Association of Texas. Dr. H. F. Connally, Waco, President; Dr. Holman Taylor, 1404 W. El Paso St., Fort Worth, Secretary.

American Medical Association. Dr. Herman L. Kretschmer, Chicago, President; Dr. Olin West, 535 North Dearborn Street, Chicago, Secretary.

Southern Medical Association. Dr. E. Vernon Mastin, St. Louis, Mo., President; C. P. Loranz, Empire Building, Birmingham, Ala., Secretary-Manager.

Southwest Allergy Forum. Dr. Ralph Bowen, Houston, President; Dr. George Owen, 910 North State St., Jackson, Miss., Secretary.

Texas Ophthalmological and Otolaryngological Society, San Antonio, December 7-8. Dr. M. K. McCullough, Dallas, President; Dr. E. D. Dumas, San Antonio, Secretary.

Texas Radiological Society. Dr. Palmer E. Wigby, Houston, President; Dr. Asa Seeds, Dallas, Secretary.

Texas Club of Internists. Dr. Merritt B. Whitten, Dallas, President; Dr. Julian C. Barton, 414 Navarro St., San Antonio, Secretary.

Texas Association of Obstetricians and Gynecologists, San Antonio, fall, 1945. Dr. Allen Stewart, Lubbock, President; Dr. Julius McIver, 1314 Medical Arts Building, Dallas, Secretary.

Texas Pediatric Society. Dr. Frank H. Lancaster, Houston, President; Dr. John Ashby, Dallas, Secretary.

Texas Neuropsychiatric Association. Dr. Titus Harris, Galveston, President; Dr. Fred Rogers, Dallas, Secretary.

Texas Railway and Traumatic Surgical Association. Dr. W. B. Reeves, Greenville, President; Dr. Ross Trigg, First National Bank Building, Fort Worth, Secretary.

Texas Society of Pathologists, Dallas, Jan. 27, 1946. Dr. Paul Brindley, Galveston, President; Dr. John J. Andujar, 1300 W. Cannon Ave., Fort Worth, Secretary.

Texas State Heart Association. Dr. Victor E. Schulze, San Angelo, President; Dr. Walter B. Whiting, Wichita Falls, Secretary.

Texas Dermatological Society. Dr. Lewis Pipkin, San Antonio President; Dr. Duncan O. Poth, 1230 Nix Professional Building, San Antonio, Secretary.

Texas Surgical Society, San Antonio, October. Dr. Sam Weaver, Dallas, President; Dr. Walter Stuck, 1426 Nix Professional Building, San Antonio, Secretary.

Texas Association of Medical Anesthetists. Dr. E. D. Embree, Houston, President; Dr. R. A. Miller, 1415 Nix Professional Building, San Antonio, Secretary.

Texas Society of Gastro-enterologists and Proctologists. Dr. James J. Gorman, El Paso, President; Dr. George M. Underwood, 4105 Live Oak Street, Dallas, Secretary.

Texas Society for Mental Hygiene. Dr. Charles W. Castner, Capitol Building, Austin, President; Miss Jennie S. Wilmot, University of Texas, Austin, Secretary.

Texas Orthopedic Society. Dr. E. A. Cayo, San Antonio, President; Dr. Edward Smith, Houston, Secretary.

Texas Tuberculosis Association. Dr. J. B. White, Amarillo, President; Miss Pansy Nichols, Austin, Executive Secretary.

Texas Public Health Association. Major Lewis Dodson, C. E., Eighth Service Command, A. S. F. Office, Service Command Engineer, Room 222, Dallas 2, Texas, President; Mr. Alan C. Love, City Hall, Waco, Secretary.

Texas Chapter American College of Chest Physicians. Dr. S. E. Thompson, Kerrville, President; Dr. Elliott Mendenhall, Dallas, Secretary.

Texas Hospital Association. Lawrence Payne, Baylor Hospital, Dallas, President; Miss Madelyne Sturdavant, 5709 Velasco, Dallas, Secretary.

Third, Panhandle, District Medical Society. Dr. D. D. Cross, Lubbock, President; Dr. George Powers, Amarillo, Acting Secretary.

Fourth District Medical Society, Brownwood, 1945. Dr. V. E. Schulze, San Angelo, President; Dr. J. M. Horn, Brownwood, Secretary.

Fifth and Sixth, Southwest District Society. Dr. Phil A. Bleakney, Harlingen, President; Dr. C. W. Tennison, San Antonio, Secretary.

Seventh, Austin District Society. Dr. Joe Gilbert, Austin, President; Dr. A. A. Terry, Austin, Secretary.

Eighth, Ninth and Tenth Districts Medical Society. Dr. J. T. Tadlock, Dayton, President; Dr. George W. Waldron, Medical Arts Building, Houston, Secretary.

Eleventh District Society. Dr. C. E. Willingham, Tyler, President; Dr. F. E. Felder, Palestine, Secretary.

Twelfth, Central Texas, District Society. Dr. C. M. Simpson, Temple, President; Dr. R. J. Hanks, Waco, Secretary.

Thirteenth, Northwestern, District Society. Dr. J. W. Foy, Seymour, President; Dr. Joe R. Wise, 1212 W. Lancaster, Fort Worth, Secretary.

Fourteenth District Society, Dallas. Dr. W. C. Morrow, Greenville, President.

Fifteenth, Northeast Texas, District Society. Dr. Joe D. Nichols, Atlanta, President; Dr. Henry H. Niehuss, Gladewater, Secretary.

ENGLAND'S BIRTH RATE INCREASES

The London correspondent of *The Journal of the American Medical Association* reports in the July 28 issue that during five years of war, England's birth rate has been rising. Last year was the highest since 1925. Not only have more babies been born but fewer have died. The chance of a baby being born dead was only three-fourths of what it was six years ago. Also, fewer mothers were being lost in childbirth. All the vital statistics for mothers and children are the best England has ever known.

SINGING INADVISABLE IN ARRESTED TUBERCULOSIS

Is singing advisable for a person who has a moderately advanced case of tuberculosis? The answer is definitely no!

In reply to this query, the July issue of *Hygeia, The Health Magazine*, advises against the extra strain that professional singing may put upon the lungs with healed lesions. Because rest is so important for the sick lung, the treatment of pulmonary tuberculosis usually involves pneumothorax—in which the lung is artificially collapsed and immobilized for healing. Possible reactivation by overloading already weakened lungs with an extra amount of work and strain would be tempting fate.

"The plea that many people with weak lungs study singing with the object of strengthening their lungs hardly applies here," the *Hygeia* article says. "Many of these people presumably had healthy lungs to begin with and have no trouble. On the other hand, if there is some weak spot in the lungs, the singing might possibly be the last straw."

IS IMMUNITY TO PNEUMONIA POSSIBLE?

Can a person develop an immunity to pneumonia? The answer, which appears in the July 7 issue of *The Journal of the American Medical Association*, is that apparent specific immunity does occur after an attack of lobar pneumonia, but it is of brief duration. Medical reports cite instances in which two attacks caused by pneumonia of the same type occurred within a year. Consequently, recovery from an attack of pneumonia may not necessarily insure immunity against a later attack.

SKIN GRAFTING IN HEMOPHILIA

Two Boston physicians—Charles S. Davidson and Stanley M. Levenson—report a successful skin graft operation on a patient with hemophilia in the June 30 issue of *The Journal of the American Medical Association*. They controlled the bleeding by applying a mixture of powdered sulfanilamide and thrombin, the enzyme which is responsible for the coagulation of the blood.

ADDITIONAL PAY PROPOSED WITH MEDICAL BADGE

On the 19th of this month the House of Representatives passed Bill H. R. 2477 which provides additional pay, corresponding to combat pay, for medical officers and enlisted men who have served with the troops under enemy fire and are entitled to wear the Medical Badge. The bill reads as follows:

That during the present war and for six months thereafter, any enlisted man of the Army who is entitled, under regulations prescribed by the Secretary of War, to wear the medical badge shall be paid additional compensation at the rate of $10 per month:

Provided, That any enlisted men whose right to wear the medical badge has been temporarily suspended may, under regulations prescribed by the Secretary of War, continue to be paid such additional compensation.

The provisions of this act shall become effective on the first day of the month following its enactment. The additional compensation provided by this act shall not be paid for any retroactive period prior to the date of the actual award of the medical badge.—S. G. O. News Notes, June 30, 1945.

ANNIVERSARY OF THE ARMY MEDICAL DEPARTMENT

The Army Medical Department will celebrate its 170th anniversary on 27 July of this year with the realization that it has grown into the largest organization of the kind ever known and that it is giving this nation's army the best medical care that soldiers have ever received.

From its inception in 1775 shortly after General Washington became Commander-in-Chief of the Continental Army until the present day, the Army Medical Department has made steady progress in military medicine; it has made scientific discoveries that have benefited all of mankind; but never has its progress in both of these categories been so rapid as in recent years.

The Honorable Robert P. Patterson, Under Secretary of War, in a tribute to the work being done by the Medical Department under Major General Norman T. Kirk, the Surgeon General, recently said that no army at any time in history has achieved a record of recovery from wounds and freedom from disease comparable to that of the American Army in this war. Mr. Patterson said also that the Medical Department is attaining new records in almost every field of its endeavor. He cited the Army's record of saving nearly 97 of every 100 wounded soldiers who reach army hospitals, the disease rate of less than one in one thousand, and similarly startling figures with reference to malaria, the dysenteries, and other diseases, showing that the Medical Department has established effective control on all disease fronts.—S. G. O. News Notes, June 30, 1945.

HOSPITALS NEEDING INTERNS AND RESIDENTS

El Paso City County Hospital, El Paso. Capacity 192 beds. George W. Cook, Col., U. S. A. Ret., Superintendent (3 interns Oct. 1, 1945).

Methodist Hospital, Dallas. Capacity 206 beds. C. W. Sensenbach, M. D., Medical Director (1 intern July 1; 3 interns in October).

Nix Hospital, San Antonio. Capacity 145; admissions 5,564. Ellen Louise Brient, R. N., Superintendent (1 intern June 1).

St. Paul Hospital, Dallas. Capacity 270 beds. C. W. Sensenbach, M. D., Medical Director (1 intern July 1).

Stephenville Hospital, Stephenville. Capacity, 65 beds. Admissions 1,775. J. C. Terrell, M. D., Medical Director (1 resident now, $300 per month).

Wichita General Hospital, Wichita Falls, capacity, 135; admissions 4,303. Mrs. Margaret Hales Rose, Superintendent (2 resident needed at once. Salary $175.00 and maintenance).

MEDICAL SEMINAR

An illustrated lecture seminar integrating the patho-physiological reactions of the human to the environment and covering a wide range of medical problems of interest to the practising physician will be conducted by Dr. William F. Peterson commencing Monday, September 17, and extending through September 22. Sessions from 9:30 to 4:30 each day in the Conference Room of the Institute of Medicine, Chicago. Detailed information, program and registration applications, can be obtained from the Secretary, Institute of Medicine of Chicago, 86 E. Randolph Street (Crerar Library Building) Chicago. Enrollment is limited.

RED CROSS BLOOD DONOR RECRUITING PROGRAM

American Red Cross chapters throughout the nation will be permitted to recruit blood donors for civilians under a program announced by National Chairman Basil O'Connor. Under this project any Red Cross chapter may take part in the operation of a donor center for civilians sponsored by a recognized medical or health agency. The blood collected and the blood derivatives produced will be made available without cost to physicians, hospitals, clinics and patients.

This civilian program is entirely separate from the Blood Donor Service operated by the American Red Cross for the armed forces, Mr. O'Connor said, and chapters in the 11 metropolitan centers where the Red Cross is now recruiting donors for the Army and Navy will not participate in it. These are: Los Angeles, San Francisco, Oakland, Portland, Ore., San Diego, Chicago, New York, Brooklyn, Boston, Philadelphia, and Washington.

The formal announcement of the new program stated in part:

"The need for provision of blood and such derivatives as blood plasma and immune (measles) globulin in amounts sufficient to meet civilian needs is very real and great. Their unique and vital place in medical practice so strongly emphasized by the war, is becoming widely recognized by medical and health agencies throughout the country, and many of these agencies already have developed or are planning programs to insure the provision of blood and its derivatives to meet civilian needs. The American Red Cross is now preparing to help its chapters to assist in this essential service."

Assistance in establishing standards and conducting a civilian program will be made available to chapters through the five Red Cross area offices. The new project will be supervised by an advisory committee of specialists to be appointed.

NEW FILMS FOR THE LIBRARY

The Motion Picture Lending Library of the Association has received three additional films for relending during the months of September, October, and November. They are suitable for both lay and professional audiences, and are made available through the courtesy of the British Information Services, an agency of the British Government. Appreciation is herewith expressed for this valuable addition to the Film Library. A concise description of each film follows:

Blood Transfusion. 16 mm., sound, showing time, 39 minutes. This film presents a survey of blood transfusion, its development in international medical history, and its present wartime techniques. It traces the development and present operation of the blood donor system in England and appeals to everyone to give blood to save the lives of others. It is suitable for both lay and professional audiences, especially those having a particular interest in volunteer blood banks.

Life Begins Again. 16 mm., sound, showing time, 21 minutes. This film gives an account of new methods of rehabilitation for men injured in industry or in the Forces. The most advanced medical treatment, planned physical exercise and freedom from worry about the future are essential if the injured men are to be restored to confidence in themselves,

as well as to physical health. This film emphasizes that rehabilitation after physical injury is both a mental and physical process.

Back to Normal. 16 mm., sound, showing time, 16 minutes. This film shows how, with the help of Roehampton Hospital, many men, women, and children who have lost one or both legs or arms, are able to live perfectly normal lives. A man with two artificial legs can dance and play tennis, a man with two artificial arms can play golf, a woman who lost a leg in the blitz can do her housework and look after her family, a child who lost a leg can skip and play with other children. It is emphasized that today the loss of a limb, even two limbs, does not mean that the victim shall live a life different from normal. The State accepts the responsibility for the war disabled, but the final responsibility rests with the community to accept and judge them, not by their disabilities but by their abilities.

MEDICAL & SURGICAL RELIEF COMMITTEE APPEALS FOR BOOKS

The Medical and Surgical Relief Committee of America has received an appeal for medical books from Dr. Severinghaus, member of the Medical Nutrition Mission in Italy. The Mission has set up in a hospital called the Polyclinica which is part of the University of Naples. The books are for the use of the Mission. Later it is intended to donate them to the Pediatric Clinic library.

The list of books requested is as follows:

1. R. P. Strong: Stitt's Diagnosis, Prevention, and Treatment of Tropical Diseases—Seventh edition. 2 volumes. Blakiston.
2. Conant, Martin, et al.: Manual of Clinical Mycology. Saunders.
3. Saxl: Pediatric Dietetics. 1937. Lea and Febiger.
4. Brennerman's loose leaf Pediatrics. Nelson, 4 volumes.
5. Best and Taylor: Physiological Basis of Medical Practice. Williams and Wilkins.
6. McLester: Clinical Nutrition and Dietotherapy. Saunders.
7. Miller: Oral Diagnosis. Blakiston.
8. Peters and Van Slyke: Quantitative Clinical Chemistry. Williams and Wilkins. 2 volumes.

As a result of the war and German occupation, the European scientific world is at a tremendous disadvantage, not only because such an appallingly large amount of equipment has been destroyed or stolen, but also because it has been impossible for professional men to continue their normal pursuits of research, teaching, writing or studying. Progress in any direction has been impossible. Therefore, whatever Americans can do to help scientific knowledge in France, Italy and other countries to reach and keep abreast of the level attained in the United States, will be of inestimable value. It is for these reasons that an appeal is being made to American physicians.

PRESIDENT ADVISED REGARDING POSTWAR MEDICAL NEEDS

Shortly after conferring with President Truman a special committee of the Committee on Postwar Medical Service of the American Medical Association sent a memorandum to the chief executive, pointing to the country's failure to "provide for the training of enough physicians to meet the demands for doctors which we know will increase after the war."

The memorandum, mailed to the President recently and published in full in the July 21 issue of *The Journal of the American Medical Association*, was prepared by four physicians—Evarts Graham, St. Louis; Harvey Stone, Baltimore, and Victor Johnson and Fred C. Zapffe, both of Chicago.

The memorandum said in part:

"Even if admissions, enrollments and graduations from our medical schools should continue at the present wartime levels, only about half of this need would be met, since 40,000 students will receive the M. D. degree in the period 1942 to 1948 and 24,000 physicians will have died during that time. Thus, under the most favorable conditions only about 16,000 additional physicians will be available after the war to do the work of 30,000.

"In spite of this, freshman enrollments in the medical schools of this country will be drastically reduced within the next year. In the past year virtually no able bodied males have been permitted to commence the two year course of college premedical studies because the Army and Navy have ceased assigning men to such studies and the Selective Service System has discontinued deferments of premedical students. In the past few years each freshman class of about 6,000 students included 4,000 to 5,000 able bodied men. These are no longer available under existing regulations.

"This deficiency can be corrected under the present Selective Service Act as follows: Defer qualified men now in college premedical studies when they reach 18 and defer 8,000 selected high school graduates of this year to commence college studies in premedicine. From these, 4,500 should be earmarked for admission to specific medical schools a year later. Repetition of this procedure each year the war lasts would effect the training of enough doctors to care for the health of the people. Consideration might also be given to the assignment of a limited number of men now under arms back to premedical studies, provided they pursued such studies satisfactorily before induction, as far as this may be consistent with military necessity."

LIBRARY NOTES

The package library consists of collections of reprints and other periodical material on various subjects, prepared for lending to members of the Association. Requests for packages should be addressed "Library, State Medical Association of Texas, 1404 W. El Paso Street, Fort Worth 3, Texas." Twenty-five cents in stamps should be enclosed with the request to cover postage and part of the expense of collecting the material. Only one package may be borrowed at a time, and packages are allowed to remain in the hands of the borrower for 14 days.

Package Service

Packages were mailed from the Library of the State Medical Association to the following during July:

Dr. W. M. Branch, El Paso—*Birth Control* (14 articles).

Dr. H. A. Scott, Austin—*Hernia, diaphragmatic* (17 articles).

Dr. Bailey R. Collins, Wichita Falls—*Hernia, diaphragmatic* (17 articles).

Dr. A. G. Barsh, Lubbock—*Roentgenology, history* (8 articles).

Southwestern Medical Library, Dallas—(2 journals).

Dr. James R. Dickson, Arp—*Rocky Mountain Spotted Fever* (18 articles).

Major Lewis T. Bullock, Amarillo—(1 journal).

Dr. Vernon A. Black, Wharton—*Syphilis, therapy* (4 articles).

Dr. D. K. Robison, Rocksprings—*Herpes, zoster* (20 articles).

Captain Alex J. Steigman, Amarillo—(1 journal).

Dr. W. S. Parks, Breckenridge—*Blood, groups* (6 articles).

Dr. R. D. Holt, Meridian—*Alcoholism* (17 articles).

Captain James H. Ferguson, Camp Maxey—(1 journal).

Lt. James L. Johnson, Muskogee, Okla.—*Osteochondritis, dissecans* (10 articles); *Arthritis* (20 articles).

Dr. R. T. Wilson, Austin—(3 journals).

Dr. A. L. Delaney, Liberty—*Whooping Cough, therapy* (5 articles).

Dr. C. L. Prichard, Abilene—*Old Age, diseases* (9 articles).

Major Roger G. Magruder, Sheppard Field—*Dystrophy, muscular* (11 articles); *Hemoglobinuria* (15 articles).

Dr. Rufus A. Roberts, Pecos—*Acne*, therapy (26 articles).

Captain Dean C. Austin, Amarillo—(2 journals).

Dr. Roland F. Knox, Wichita Falls—*Blood, calcium* (14 articles).

Dr. O. E. Puckett, Carlsbad, New Mex.—*Convulsions* (12 articles).

Major Alexander E. Pearce, El Paso—(4 journals).

Ashburn General Hospital, McKinney—(2 journals).

ACCESSIONS

Springfield, Illinois, Charles C. Thomas, Publisher —Rankin and Graham: Cancer of the Colon and Rectum; Pinner: Pulmonary Tuberculosis in the Adult.

New York, N. Y., The Macmillan Company—Strecker and Appel: Psychiatry in Modern Warfare.

Waltham, Mass., The Chronica Botanica Company —Wodehouse: Hayfever Plants.

SUMMARY

REPRINTS RECEIVED, 554.	LOCAL USERS, 18.
JOURNALS RECEIVED, 187.	BORROWERS BY MAIL, 24.
ITEMS CONSULTED, 57.	PACKAGES MAILED, 27.
ITEMS TAKEN OUT, 80.	ITEMS MAILED, 250.

TOTAL ITEMS CONSULTED AND LOANED, 387.

MOTION PICTURE LENDING LIBRARY

Motion picture films on medical subjects, 16 mm., both silent and sound, some in color, and suitable for either medical or lay audiences, are available for loan to county medical societies, hospital staffs, or individual physicians, on request. Borrowers will be required to pay only the cost of shipment of the films, by express, with insurance, and for any damage to films while in the hands of the borrower.

Requests for films should be addressed to "Motion Picture Lending Library, State Medical Association of Texas, 1404 West El Paso Street, Fort Worth 3, Texas." A list of available films, with descriptions, will be furnished on request.

The following motion picture films were loaned by the Motion Picture Lending Library of the State Medical Association during July:

Choose to Live (Available through courtesy of the United States Public Health Service and the American Society for the Control of Cancer)—Business and Professional Women's Clubs, Houston area.

Vitamins, and Some Deficiency Diseases (Available through the courtesy of the Lederle Laboratories, Inc.)—Lamar College premedical students, Beaumont.

NEWS

Wichita General Hospital Staff elected the following officers at a recent meeting, informs the Wichita Falls *Record-News:* Dr. O. W. Wilson, president; Dr. W. P. Lowry, vice-president; Dr. O. C. Egdorf, secretary; Drs. T. C. Lynch, B. W. Dorbandt and Harry Ledbetter, executive committee members.

Grayson County Auxiliary Members Honored.—As a compliment to their wives, members of the Grayson County Medical Society entertained them with a fish supper at the Rod and Gun Club, June 29, reports the Denison *Herald.* Twenty-seven physicians and their wives enjoyed the occasion. Dr. S. O. Levin, Denison, is president of Grayson County Medical Society and Mrs. W. A. Lee, Denison, is president of the Auxiliary.

Postgraduate Courses Southwestern Medical College.—Dr. Donald Slaughter, dean of students, Southwestern Medical College, announced July 4 that two months of postgraduate instruction are now available to both medical officers returning to civilian life and to civilian practitioners at Southwestern Medical College. One course is in internal medicine and pediatrics, and another in surgery, obstetrics and gynecology. Each of the courses, under the direction of Dr. W. F. Mengert, professor of obstetrics and gynecology, will begin as soon as ten physicians enroll. The College can accommodate only twenty physicians in postgraduate instruction at a time, according to Dr. Slaughter.

Dr. C. M. Rosser, professor of proctology, Southwestern Medical College, will conduct similar one and two weeks courses to be sponsored by the Dallas Southern Clinical Society.—*Dallas News.*

The Southwestern Section of the Society of Experimental Biology and Medicine met June 9 at Baylor University College of Medicine, Houston, with Dr. James A. Greene, dean of the clinical faculty, presiding as section chairman, states the Houston *Press.* Forty-five representatives were present from medical schools, colleges and universities in Texas, Oklahoma and Arkansas. The meeting was open to Houston physicians and members of staffs of Houston hospitals. Morning and afternoon sessions were devoted to study of results of recent biological and medical research.

Dr. Chauncey D. Leake, dean of the University of Texas School of Medicine, was elected chairman, succeeding Dr. Greene. The next meeting will be held in October, and will probably be either in Galveston or Oklahoma City.

Dallas Venereal Disease Reports.—Dr. Charles W. Kelley, assistant to Dr. Author G. Schoch, director of the Dallas Venereal Disease Clinic and Penicillin Research Center, reports that 400 children, under 12 years of age, have been treated for either syphilis or gonorrhea at two Dallas clinics this year. The treatments were given at the Venereal Disease Clinic and the Children's Hospital of Texas. Some of the children had congenital syphilis, while others had acquired syphilis. It was estimated that most of the 400 cases had originated in Dallas County.

Children with syphilis are given penicillin injections at the clinic every three hours day and night and, according to Dr. Kelley, 98 per cent are cured in seven and one-half days. Gonorrheal patients are given five intramuscular injections of penicillin and cure is effected in twelve hours, Dr. Kelly asserted. The clinic is located in the basement of Parkland Hospital.

New Hospital Planned for Houston.—Plans for a $2,500,000 new Methodist hospital, to be built after the war in the Texas Medical Center, and also including a nurses' home, doctors and interns building, power plant and laundry, were announced July 3, by chairman of the Methodist Hospital Board of Trustees, according to the Houston *Chronicle.* Architects have been selected to make preliminary drawings of the 300-bed hospital and a campaign to raise more funds will be inaugurated this fall. The present 130-bed plant, worth about $200,000, will be sold as soon as the new plant is built.

Building of new facilities results directly from the recent one million dollar gift from Mr. and Mrs. H. R. Cullen to the hospital and through the assistance and coöperation of the M. D. Anderson Foundation, which is donating the land. The present plant

was established in 1924 through a $50,000 gift of the late Dr. O. L. Norsworthy.

Southwestern Medical Foundation Open House was held July 1, from 3 to 6 p. m., marking the second anniversary of the school's opening, the Dallas *News* reports editorially. Attention is called to the fact that though necessarily housed in temporary buildings primarily because of wartime conditions, the college has 206 students and a faculty of more than 200 teachers, including many highly trained specialists who practice in Dallas. The *News* further points out that Southwestern Medical College is rated class A by American Medical Association and American Association of Medical Colleges. Its graduates thus far have nearly all become medical officers in the armed forces. During its two years of existence rapid strides have been made in research and many of its investigations and experiments have been reported. Rapid expansion of the college is anticipated as soon as peace time conditions return. The *News* further points out that eventually the college will be a part of the great medical center to be established in Dallas by the Southwestern Medical Foundation, which hopes to have at least ten million dollars in buildings and 15 million raised in endowments.

Special Training for Eighth Service Command Medical Officers will be made available by the Rockefeller Foundation during the coming year, according to the Dallas *News*. The training will be for Army physicians who have graduated from medical schools within the last ten years and is part of a $25,000 medical conference and teaching program in about forty Eighth Service Command hospitals. The Rockefeller Foundation began its work in Army hospitals in the southwest two years ago at the invitation of Brig. Gen. W. Lee Hart, medical director, Eighth Service Command. From twenty-five to fifty outstanding medical school teachers are sent to the hospitals for consultation with Army medical officers each year. Emphasis is on medical, surgical, orthopedic and psychiatric cases. Clinical pathological conferences are held once a week with information furnished by the Foundation. The complete histories—physical, laboratory and pathological—of selected civilian hospital cases are studied. The Foundation also supplements Army hospital libraries. The program is under the direction of Dr. Allen Gregg, foundation director for the medical sciences.

Osteopaths and the G. I. Baby Act.—Texas osteopaths suffered a major reverse July 11 in their attempt to force revision of regulations concerning the so-called "GI Baby Act," when the third court of civil appeals at Austin ruled that it is a Federal matter and state courts have no jurisdiction, advises the *Austin-American*. Judgment of the Travis County district court was reversed, a permanent injunction issued against the State Board of Health dissolved, and the case dismissed in an opinion written by Associate Justice N. B. Blair. The litigation developed out of rules and regulations laid down by the Federal Children's Bureau and adopted by the Texas State Board of Health relating to Texas' share of $42,800,000 Federal appropriation for emergency medical care of wives and infants of enlisted men. The regulations of the Children's Bureau provide that payment for such care will be made only to physicians licensed in the state to practice medicine, who are graduates of a medical school approved by the Council on Medical Education and Hospitals of the American Medical Association. The higher court held that the State Board of Health and State Health Officer are acting as agents of the Federal government.

San Antonio Hospitals Merged.—The Medical and Surgical Memorial Hospital, San Antonio, operating under a non-profit charter, which previously had absorbed the Eye, Ear, Nose and Throat Hospital which it remodeled and made into an annex, recently acquired the Physicians and Surgeons Hospital, according to an announcement by the chairman of the board of trustees, in the San Antonio *Evening News*. The enlarged institution will be known as the Medical and Surgical Hospital.

The purpose of the merger, according to the announcement, is not only to increase hospital facilities in San Antonio and the Southwest, but to provide for a non-profit diagnostic and teaching clinic and medical center, which will feature postgraduate medical education and research work. It is hoped to render vastly improved medical service while reducing the cost to the patient. The board of directors propose to erect on properties now controlled by it, quarters for housing of the clinic and to build a great hospital and medical center on the larger block of land where the Physicians and Surgeons Hospital is now situated. Work will begin as soon as possible on a four-story addition to the Memorial and Surgical office building for the clinic.

The enlarged Hospital will provide 215 beds. The Medical and Surgical Hospital now has 150 beds and the Physicians and Surgeons 65. The two hospitals, situated on opposite sides of Camden Street may be linked by an underground passage. The chairman of the board of directors, in making the announcement, stated that it is hoped that the public will take an interest in the project and that wealthy, public-spirited citizens and others may endow the institution as a memorial to their sense and feeling of responsibility to aid human suffering.

U. of T. Medical News.—C. M. Pomerat, Ph. D., professor of anatomy, is a guest worker on invitation for a month at the Instituto de Salubridad Enfermidades Tropicales, Mexico City, D. F. He will work on tissue culture experiments with reference to reticulo-endothelial immune sera.

Dr. H. W. Neidhardt of the Department of Pathology, University of Kansas School of Medicine, has been appointed Assistant Professor of Pathology at the University of Texas Medical Branch. Dr. Neidhardt begins his new duties on August 1.

W. A. Selle, Ph. D., professor of physiology, is a guest research worker for several months at the Massachusetts Institute of Technology, Cambridge, on problems in physical medicine, under the auspices of the Baruch Committee on Physical Medicine.

MacDonald Fulton, Ph. D., formerly professor of bacteriology at Southwestern Medical College, Dallas, has been appointed visiting professor of pediatric research of the University of Texas Medical Branch, Galveston. Dr. Fulton will be in charge of bacteriological studies relating to Salmonella organisms as part of the Child Health Program supported by the William Buchanan Foundation of Texarkana.

The Smith, Kline & French Laboratory of Philadelphia has made a grant to the Pharmacology Laboratory of the University of Texas Medical Branch, Galveston, for a study of the influence of the reticulo-endothelial system in trypanosomiasis and syphilis. Paul L. Ewing, Ph. D., Associate Professor of Pharmacology, will have charge of the research effort and will conduct certain studies under the direction of Doctor Arthur L. Tatum, Professor of Pharmacology at the University of Wisconsin Medical School, Madison.

Awards for Fertility Research and Maternity Care.—For the second successive year, two Albert and Mary Lasker Foundation awards of $500 each will be given through the Planned Parenthood Federation of America, Inc., for significant contribution to the improvement of maternal health care and for research in human fertility, it was announced re-

cently by Dr. J. H. Upham, chairman of the Federation's National Medical Advisory Council. The first award will be made to the scientist making the most significant contribution in research in human fertility, either in the control of conception or in the correction of infertility. The second award will be made to the public health service in a state or community for meritorious action in developing a complete program of maternal health care, including child spacing. The individual recipient of the second award will be the executive officer most responsible for the development of the program.

American Optical Company Wins Army-Navy Production Award for the fifth time, the company was recently advised by Under Secretary of War Robert P. Patterson. The company is now authorized to fly the Army-Navy Production Award flag, with its four white stars, for a full year before being considered again by the Army-Navy Boards for production awards. American Optical Company won the original award in October 1942. Succeeding awards were won August 1942; April 1944; and October 1944. Vital military optical products are manufactured by the American Optical Company for the Army medical department, Army Air Forces, and other branches of the U. S. Army, Navy and Marine Corps. These products include special frames, lenses and cases and the necessary prescription services for the Army through branch offices; mobile optical units as well as eye examining instruments; and many types of military goggles for the armed forces.

Military Personals

Lt. Commdr. Murray W. Ballenger of Lubbock was recently credited with the saving of many lives by the 8th Naval District Headquarters in direction of extraordinary work by the medical corps of the USS Nashville, when attacked by Japanese suicide planes last December 13 in the Philippines, according to the Fort Worth *Star-Telegram.*

Capt. Vincent S. Pawelek, Jr., was recently promoted from the rank of Lieutenant, informs the Karnes City *Citation.* Captain Pawelek, whose home is in Falls City, Texas, entered army service after completing an internship at Robert B. Green Hospital, San Antonio, March 31, 1944. He has been in overseas service since November 4, 1944.

Lt. Urban J. Dowling, Sweetwater, is now assistant surgeon in the 77th Field Hospital near Covey, France, where he is in charge of orthopedics, informs the Sweetwater *Reporter.*

Lt. Eugene H. Lindsey, USNR, Beaumont, recently returned to this country from an extended period of foreign service, advises the Beaumont *Journal.* He left the United States for foreign service in October, 1943, saw eight months of sea duty in the Pacific, following which he was stationed in Australia for about seven months, and was then on duty in the Philippines before returning home.

Commdr. Walter Grady Reddick, Dallas, was recently the recipient of Northwestern University's Alumni Association's award of merit "in recognition of worthy achievement," states the Dallas *Times Herald.* Commander Reddick entered the Navy as Lieutenant Commander in 1942 and spent many months in the Pacific theatre where he became an authority on tropical diseases.

Major A. C. Bennett has returned to civilian practice at Marlin, following an extended period of service in the medical corps of the Army. Dr. Bennett entered service as a captain in the medical corps of the U. S. Army Air Corps April 5, 1942. When Major Bennett was overseas he was in middle and northern Africa, Iraq, Iran and India.—*Marlin Democrat.*

Dr. Henry Holle, Austin, has been assigned as medical officer to the temporary delegation being sent by UNRRA to Warsaw, Poland. Dr. Holle has been associated with the Health Division of UNRRA since September 4, 1944. He has been an officer in the U. S. Public Health Service since 1934.

Personals

Dr. Gladys Fashena, assistant professor of pediatrics and instructor in pathology, Southwestern Medical College, Dallas, has been elected to membership in the American Society for Clinical Investigation. Dr. Fashena is now the only active member of the Society in Texas. Her research work is concerned mostly with metabolic studies in infancy, blood chemistry and rheumatic fever. Dr. Fashena came to Southwestern Medical College two years ago when it was founded.

Dr. Kathryn Buckner, Dallas, is taking postgraduate work in psychosomatic medicine at Temple University, Philadelphia, reports the Dallas *News.*

Dr. Charles A. Shoultz, Bay City, was recently appointed health officer of Matagorda County for a two-year term, advises the Bay City *Tribune.* The Bay City *Tribune* also reports that Dr. H. H. Loos and Dr. Shoultz are re-appointed members of the board of managers of the Matagorda County General Hospital.

Dr. W. P. Harrison, Teague, was elected to serve a second term as chairman of the Texas State Board of Health, at a meeting of the board in Austin, June 11, reports the Teague *Chronicle.* Dr. Harrison first served as chairman of the Board when appointed by former Governor James V. Allred and later served a re-appointment under former Governor W. Lee O'Daniel.

Dr. E. S. Crocker, Houston, is taking postgraduate work at Boston and Baltimore, advises the Houston *Post.* Dr. Crocker was accompanied by Mrs. Crocker.

Dr. D. C. Atkinson, Dallas, was recently severely beaten by an unidentified Negro who tried to highjack him in the parking lot in the rear of Baylor Hospital, states the Dallas *Times Herald.* The Negro approached Dr. Atkinson from behind when Dr. Atkinson left the hospital shortly after midnight, struck him in the neck and tried to remove his billfold from his hip pocket. In the tussle that ensued, Dr. Atkinson was knocked down three times by the husky robber before the Negro fled.

Dr. Walter G. Stuck, San Antonio, has been appointed a member of the Council of the Southern Medical Association for Texas for a regional council term of five years, beginning at the close of the annual meeting in November. Dr. Stuck succeeds Dr. Curtice Rosser, Dallas, who, having served the constitutional limit, is not eligible for reappointment.—*Southern Medical Journal.*

Mrs. Gus Bertner, Little Rock, Arkansas, mother of *Dr. E. W. Bertner*, of Houston, Trustee and past President of the State Medical Association, died July 4, at her home.

Marriages

Dr. Theodore S. Howell, Houston, was married recently to Miss Mildred Hendrix. Their home is at present in Baytown, Texas. Dr. Howell received his M. D. degree from Baylor University School of Medicine.

SOCIETY NEWS

Anderson-Houston-Leon Counties Society

June 17, 1945

(Reported by A. L. Hathcock, Councilor, Eleventh District)

Members of the Anderson-Houston-Leon Counties Medical Society, physicians from adjoining county societies, and the general public were guests of Dr. and Mrs. C. W. Butler, Jr., at Lakeview Property,

three and one-half miles west of Crockett, June 17. The following program was carried out:

Address of Welcome—C. W. Butler, Jr.
Response to Welcome Address—Tony Travis, Travis Hospital, Jacksonville.
Address—Homer P. Rainey, former president, University of Texas.
High Blood Pressure—Paul V. Ledbetter, Houston.
Interesting Study of Gastro-intestinal Tract—John Rushing, Houston.
The Management of Cancer of the Rectum and Colon—Herbert T. Hayes, Houston.
Socialized Medicine—Frank Selecman, Dallas.
The Legal Aspect of Socialized Medicine from the Doctor's Viewpoint—Hon. J. B. Sallas, Crockett.
The Legal Aspect of Socialized Medicine from the Public or Layman's Viewpoint—Senator Roger Knight, Austin.
Esthetics of the Practice of Medicine—A. L. Hathcock, Palestine.
Toxic Goitre—Charles Hallson, Houston.
The Veterans Return—Brig. Gen. J. Watt Page, Austin.
Herniated Lumbar Disc—C. C. Nash, Dallas.
The Use of Radium in Medicine—C. M. Griswold, Houston.
Internal Fixation of Intertrochanteric Fractures by Means of the Austin-Moore Blade Plate—Frank O. McGehee, Houston.
Diagnosis and Treatment of Pulmonary Hemorrhage—Major Charles E. Gerson, Harmon Hospital, Longview.
Rat Bite Fever—George W. Salmon, Baylor University, Houston.
Progress of the Medical Profession—Roy Selman, County Judge, Houston County.
The Administration of the Practice of Medicine Overseas Compared to Administration of Medicine at Home—Comdr. J. L. Barnett.
Veterans Benefits—R. H. Claypool, State Officer-Veterans of Foreign Wars.
Vocational Education Postwar Period—J. L. Moses, Sam Houston State Teachers College, Huntsville.
The Management and Operation of Small Hospitals—J. M. Travis, Jacksonville.
The Upward Struggle of the College—G. L. Prince, M. D., and Dean W. A. Perry, Mary Allen Junior College (Negro).
Activities of the Soldier in the South and Southwest Pacific—Lt. C. F. Butler, M. C., A. U. S.

The medical papers were presented in an auditorium of the Butler Memorial Hospital, and the addresses of special interest to the public were broadcast over the spacious grounds by a loud speaker sound truck. In addition to the splendid program provided, a barbecue was served all in attendance, and magnificent entertainment was available in the form of instrumental and vocal music, as well as horseback riding, fishing and swimming. Music was furnished by orchestras and string bands and vocal music by Mrs. Paul B. Stokes and Carl Leediker's quartet. Guests were shown through the Memorial Hospital and over the spacious grounds surrounding the institution.

Brown-Comanche-Mills-San Saba Counties Society

June 11, 1945

Sarcoma of the Gastro-Intestinal Tract—G. V. Brindley, Temple.
Observances and Results of Penicillin Therapy—R. R. Curtis, Temple.

Brown-Comanche-Mills-San Saba Counties Medical Society met June 11 at Lake Merritt, near Goldthwaite. Following a barbecue, the scientific program as given above was carried out.

The meeting was attended by a number of physicians from other counties, officials of the Santa Fe Railway, and Brig. Gen. James A. Bethea, Commanding Officer, McCloskey General Hospital, Temple, as special guests.

El Paso County Society

July 13, 1945

Industrial Hygiene—Phillip Drinker, M. D., Professor of Industrial Hygiene, Harvard School of Public Health.
Pneumoconiosis and Aluminum Therapy—Oscar Sander, Milwaukee, Wisconsin.

El Paso County Medical Society held a joint meeting with the El Paso Chapters of American Institute of Mining and Metallurgical Engineers and the American Association of Engineers at the Hotel Cortez, El Paso. The scientific program as given above was carried out.

Phillip Drinker, managing editor of the *Journal of Industrial Hygiene and Toxicology*, who during the war has been consultant to the Maritime Commission on industrial hazards in shipyards, emphasized in his talk the hazards in crushing plants, mines and foundries.

Dr. Oscar Sander illustrated his address on pneumosoniosis and aluminum therapy with roentgenograms. He discussed industrial diseases of the chest. Dr. Sander for the past fifteen years has been an industrial plant consultant on welding and dust hazards.

Gray-Wheeler Counties Society

June 21, 1945

(Reported by H. L. Wilder, Secretary)

Clinical Cases:
a. Fungus Infection of Mouth and Throat—P. C. Christian, Pampa.
b. Pulmonary Atelectasis in a Baby—H. L. Wilder, Pampa.
c. Pleurodynia—W. Purviance, Pampa.
d. Knife Wounds of the Eye—C. E. High, Pampa.
Complications following Tonsillectomy—C. E. High, Pampa.

Gray-Wheeler Counties Medical Society met June 21, at the Hillson Coffee Shop, Pampa. The scientific program as given above was carried out.

The case of fungus infection of the mouth and throat, reported by P. C. Christian, was confirmed by laboratory examination. The condition had been exceedingly resistant to all methods of treatment used. At one time the patient had exhibited a temperature of 102 F.

The case of atelectasis reported by H. L. Wilder occurred in the right lung of a baby 4 weeks old, and was clearly shown in the roentgen study. X-ray examination was made because of the symptoms of crowing, dyspnea and slight cynosis, which indicated the possible presence of an enlarged thymus. A roentgenogram revealed the correct diagnosis.

The case of pleurodynia, reported by W. Purviance, simulated gallbladder disease since the pain was under the eleventh rib on the right side. Cholecystography showed a normal gallbladder; the negative findings coupled with location and distribution of pain aided in the diagnosis. Pain in these cases ranges along the diaphragm.

In the case of knife wound of the eyeball reported by C. E. High, a hair which had been carried into the wound by the knife was successfully removed.

The paper of C. E. High on complications following tonsillectomy received general discussion.

Other Proceedings.—The Society voted to cooperate with the University of Texas Postgraduate program, in which program members of the faculty of the medical department of the university will contribute to programs of medical meetings throughout the state.

W. Purviance was appointed in charge of the program for the August meeting, which will be presented at the Army Air Field.

Jefferson County Society

July 9, 1945

(Reported by L. R. Byrd, Jr., Secretary)

The Indications for Bronchoscopy—George S. McReynolds, Associate Professor of Otolaryngology, University of Texas School of Medicine, Galveston.

Jefferson County Medical Society met July 9, at the Hotel Dieu, Beaumont, with Stuart T. Wier, president, presiding. The scientific program as given above was carried out. Dr. McReynolds' paper was discussed by M. A. Cunningham, Taylor Walker, J. Y. Harper, L. R. Byrd and Stuart Wier.

A letter from the University of Texas School of Medicine regarding a postgraduate program, was read.

Following a discussion of whether or not the Society should suspend meetings during the summer, W. D. Brown presented the following proposed amendment to the by-laws: "Beginning with the year 1946, the regular meetings of the Society will be dispensed with in the months of June, July and August, and the business of the Society will be carried on by executive sessions during these months

as needed." The proposed amendment will be acted upon at the next regular meeting in August.

Nine County Society

June 15, 1945

Anemia: Diagnosis and Treatment—B. F. Stout, San Antonio.
Points on Pulmonary Diagnosis—H. R. Hoskins, San Antonio.
The Abuse of Rest—Charles Venable, San Antonio.
Arthritides—Robert Thomas, San Antonio.
Refrigeration Anesthesia—J. R. Gandy, Houston.

The Medina-Uvalde-Maverick-Val Verde-Edwards-Real-Kinney-Terrell-Zavala Counties Medical Society met June 15 at the Roswell Hotel, Del Rio. The scientific program as given above was carried out.

In addition to the honor guest speaker, officers from Laughlin Field were special guests.

San Patricio-Aransas-Refugio Counties Society

June 15, 1945

Cancer of the Bone—G. E. Glover, Austwell.

San Patricio-Aransas-Refugio Counties Medical Society were guests June 15, of Dr. Charles F. Cron, Rockport. The scientific program as given above was carried out. Dr. Glover illustrated his paper on cancer of the bone with roentgenograms.

Preceding the scientific program, a dinner was held at Horton's Grill.

Twelfth District Medical Society

July 10, 1945

(Reported by Robert J. Hanks, Secretary)

Modern Concepts of Hypertensive Vascular Disease—Raymond L. Gregory, Professor of Medicine.
Diagnosis and Medical Management of Suppurative Pulmonary Disease—W. Frank McKinley, Jr., Assistant Professor of Medicine.
Surgical Management of Suppurative Pulmonary Disease—Edgar J. Poth, Professor of Surgery.
Food Poisoning and Diarrheas—Robert I. Wise, Assistant Professor of Bacteriology.
Clinical Abnormalities of the Adrenal Gland—Raymond L. Gregory, Professor of Surgery.

The Twelfth (Central Texas) District Medical Society met July 10, at the Country Club, Marlin, guests of Falls County Medical Society. Forty-seven members were present. R. K. Harlan, president, presided and a scientific program arranged by George M. Decherd, Jr., Associate Professor of Medicine, University of Texas School of Medicine, Galveston, was presented. All speakers on the program were members of the faculty of the University of Texas School of Medicine.

Modern Concepts of Hypertensive Vascular Disease (Raymond L. Gregory).—Hypertension is one of the outstanding causes of death. It is nearly as frequent as the common cold. One-half million die each year from hypertension. Bright brought out the idea of an enlarged heart along with renal disease as a causative factor of hypertension. He could not determine blood pressure because he did not have a manometer. In 1934, Goldblatt produced hypertension in experimental animals by partially constricting the renal arteries. In 1898, Tigerstedt and Von Bergman proved that renin, a renal substance, would produce hypertension. It has been definitely proved that the kidney per se does not cause hypertension and that the nervous system has nothing to do with it. Experimentally, the kidney and blood vessels have been denervated and the renal artery constricted partially, and hypertension still ensues. If the kidney is removed and transplanted elsewhere in the body, hypertension is produced if the arterial supply is partially constricted.

If renin is injected into the various organs of the body, vasoconstriction is not caused; if plasma is added to the renin, constriction does occur. Renin acts on something in plasma that produces a vasoconstriction. Page made an extract which will reduce hypertension but a large number of kidneys is necessary to obtain enough extract to do any good; the procedure is much too expensive for universal use. Wakerlin has produced an anti-renin which is still experimental and not proven, but it will reduce blood pressure. Surgery on the symptomatic nervous system has been advocated by Peet, Adson, Grinson and Smithwick. This type of operation will reduce the pressure temperature but it is too early to evaluate its efficiency.

The Diagnosis and Modern Management of Suppurative Pulmonary Disease (W. Frank McKinley, Jr.).—Pulmonary disease which may be accompanied by suppuration include fungus infection, lung abscess, bronchiectasis, cystic diseases of the lung, bronchogenic carcinoma, and tuberculosis.

The fungus infections include (a) actinomycosis or ray fungus, and (b) bronchomoniliasis.

The types of actinomycosis encountered are (1) bronchitis, (2) pneumonic, (3) pleuro-pneumonic, and (4) sinus formation. The diagnosis is made by sputum study. The condition is treated with sulfa drugs, iodine and x-ray radiation. Recently actinomycosis was found to respond favorably to sulfadiazene in large doses over long periods of time.

Bronchomoniliasis occurs in three forms: (1) mild, (2) moderately severe, and (3) severe.

In the mild form the patient has a cough and scattered rales in the chest. There is no fever and recovery occurs in a few months.

In the moderately severe form, the patient has fever, cough, dyspnea, and hemoptysis.

In the severe form there is fever, dyspnea, hemoptysis and toxic manifestations.

Diagnosis of the condition is made by sputum study and cultures. The condition is treated by potassium iodide and autogenous vaccine.

Acute lung abscess may be divided into the aspiration type, postpneumonic type and septicemic type. Abscesses may be single or multiple. The diagnosis is made by history, x-ray and sputum study. Treatment consists of postural drainage, bronchoscopic drainage and sulfa and penicillin therapy.

Bronchiectasis may be congenital or acquired, the latter resulting from bronchial obstruction. Treatment consists of expectorants, postural drainage and bronchoscopic drainage. Sulfa drugs may be given orally, and penicillin is instilled by the bronchoscope, by nebulization or parentally.

Cystic diseases of the lungs may be either single or multiple. The differential diagnosis includes pneumonia, thin wall tuberculosis cavity, lung abscess, diaphragmatic hernia and emphysematous bullae. The treatment for cystic diseases is surgery.

Bronchogenic carcinoma may imitate any other disease of the lung. It is more common in males in the ratio of four to one. It is second in frequency to gastric carcinoma. The etiology is the same as for carcinoma elsewhere in the body. Differential diagnosis includes all other pulmonary infections. The treatment is surgical and x-ray radiation.

There are 8,000 cases of pulmonary tuberculosis in Texas each year, for which there are only 3,000 beds available. Treatment consists of rest, artificial pneumothorax, crushing of the phrenic nerve and thoracoplasty. At the present time, drug therapy is discredited in that promin, diasone, promizole and endo-toxoid have failed to produce cures that were originally claimed for them.

Following the reading of this paper, the meeting recessed for a delicious luncheon of barbecued lamb. After the luncheon, Dr. C. D. Leake, dean and vice-president of the University of Texas School of Medicine, spoke on the subject of "The Doctor's Library." Dr. Leake pointed out that the doctor is a cultural symbol in his community. He is supposed to know music, art and literature and is expected to converse intelligently regarding any of these arts. He is looked upon as a cultural leader in his community. He is supposed to take an active part in the improvement of his home town and all civic enterprises. For

these reasons he should choose his library wisely and well. Books should be like "old wine and old friends," cherished beyond material worth. Good literature is timeless and the old medical treatise contains information which is useful today. Libraries that are carefully collected are worth much more from the standpoint of self-satisfaction, as well as from a financial value. Dr. Leake's talk was inspiring and all who heard it came away with a new and endearing appreciation of books and good literature.

Surgical Management of Pulmonary Suppurative Disease (Edgar J. Poth).—Attention was called to the fact that normal respiratory function must be present in sufficient lung tissue before radical lung surgery may be attempted. Lantern slides were exhibited, showing what happens to respiratory function following crushing of the phrenic nerve, pneumothorax, puncture wound, thoracoplasty, and atalectasis. When fluid is removed in cases of pleural effusion it should be replaced by air so that the fluid will not be pocketed in multiple levels. Closed drainage and irrigation will take care of the majority of cases of empyema. Instillation of sulfa drugs and penicillin in the pleural cavity are of value in the acute empyema cases but not in the chronic form with thickened pleura. Surgery should be employed only in the fibrotic and not the caseous type of tuberculosis. It is used to collapse a cavity that cannot be closed by any other means. The patient must have a certain amount of inherent resistance against the disease if the operation is to be successful. Lobectomy and pneumonectomy may be employed in the chronic type of lung abscess and bronchiectasis. Acute lung abscess should be drained surgically if medical treatment does not help in a short period of time.

Food Poisoning and Diarrheas (Robert I. Wise).—Food poisoning is a common condition which appears suddenly and from which recovery occurs in a day or two. There are two types of food poisoning: (1) food infection and (2) food intoxication. Food infections may be (1) salmonella, or (2) alfa-streptococci. The food intoxications are caused by (1) toxin of Clostridium botulinum and (2) enterotoxin of staphylococcus.

The incubation period is longer in food infection than in food intoxication; incubation in the latter is rapid. Cl. botulinum can be destroyed by pressure cooking or sufficient heating of food. Toxins are also destroyed by heating of foods before use. Cl. botulinum infection carries a mortality of 65 per cent, unless the antitoxin is given. The enterotoxin of staphylococci is resistant to heating to a boiling point of one-half hour. This type of food poisoning is commonly found in cream puffs, cream pies and eclairs. The germ is present on the skin of the pastry baker and is transmitted to the pastry. The toxin survives, even though the organism is killed. This type carries a very low mortality rate.

Clinical Abnormalities of the Adrenal Gland (Raymond L. Gregory).—Tumors of the adrenal gland are about 90 per cent benign and 10 per cent malignant. Addison realized that a difference of the hormones produced by the cortex of the gland causes the disease which bears his name. He also knew that the cortex of the gland is necessary for life, while the medulla is not. The adrenal gland produces three hormones: (1) electrolite and salt hormone, available commercially now; (2) the hormone that controls glycogen metabolism in the liver; (3) the n-hormone which controls the ability of the body to retain amino-acids and to utilize them. Fifty per cent of Addison's disease is produced by tuberculosis of the adrenal gland, 25 per cent by tumors and 25 per cent by a deficiency of the secreting ability of the gland substance. In Addison's disease, the low blood pressure is the result of a lack of amino acids. In the treatment of this condition, saline and glucose are given along with whole adrenal cortex and desoxycorticosterone. The mortality is high in Addison's disease even though the treatment is in some cases satisfactory. Patients are prone to collapse when there is a sufficient amount of amino-acids, salts and glucose in the body. Therefore, there must be some unknown hormone that is not present in the extract which we have today, which is necessary for life.

The Technique of Skin Grafting (Edgar J. Poth).—Fat or subcutaneous fascia must not be included in a skin graft. A medium spilt graft is the best. It must be cut with a sharp instrument so as not to traumatize the blood vessels. The blood vessels must be open so that the graft will take. Lantern slides of a new type of skin graft knife invented by Dr. Poth were shown. The skin of one person cannot be transferred to another except in rare instances. The surface must be free from blood and must be dry at the time of the grafting. The graft is cemented on a layer of gauze with collodion, which enables the operator to handle it much better. After the graft has been placed, it is covered with eight layers of gauze, saturated with glycerine and zephiran to hold it in place. Heavy pressure is not used. Penicillin is given intramuscularly in doses of 20,000 units every four hours for a few days to help keep down infection after the operation. A beautiful technicolor motion picture was shown illustrating Dr. Poth's technique of skin grafting.

The next meeting of the Society will be held in Waco, January 8, 1946.

BOOK NOTES

[1]**Penicillin Therapy, including Tyrothricin and other Antibiotic Therapy.** By John A. Kolmer, M. S., M. D., Dr. P. H., Sc. D., LL. D., L. H. D., F. A. C. P. Professor of Medicine in the School of Medicine and the School of Dentistry, Temple University; Director of the Research Institute of Cutaneous Medicine; Formerly Professor of Pathology and Bacteriology. Graduate School of Medicine, University of Pennsylvania. Cloth, 302 pages. Price, $5.00. New York and London, D. Appleton-Century Company, Incorporated, 1945.

Within the past few months four books have appeared on penicillin and antibiotics, to indicate the extraordinary interest in the amazing practical success of these agents in medicine. The most judicious and scientific of these volumes is Microbial Antagonisms and Antibiotic Substances, by S. A. Waksman (Commonwealth Fund, New York, 1945, price $3.50). Another clinical volume like Kolmer's is Penicillin and other Antibiotic Agents by W. E. Herrell (Saunders, Philadelphia, 1945, price $5.00). There is also a popular Story of Penicillin, by B. Sokoloff (Diff-Davis, New York, 1945, price, $2.00). It is also pertinent to note the many admirable brochures available for free distribution by manufacturers, including Winthrop and Merck. The printed brochures issued by Merck & Company, of Rahway, New Jersey, are comprehensive in their abstracts of significant publications on antibiotics.

Dr. Kolmer's volume is an excellent summary of what is currently known on antibiotics. It is designed particularly for practical clinical use. It discusses the chemotherapeutic compounds of biologic origin, and gives much detail on the production of penicillin and on methods for its detection and assay. Offering a brief discussion of the physical and chemical properties of the agent, Dr. Kolmer carefully reviews the antimicrobial activity of penicillin, and its phar-

[1]Reviewed by Chauncey D. Leake, Ph. D., Dean, University of Texas School of Medicine, Galveston, Texas.

macology and negligible toxicity. The volume gives detailed instruction on administration and dosage and fully discusses the principles of penicillin therapy. The remainder of the volume consists in the use of penicillin in specific disease conditions.

There is a short chapter on tyrothricin, gramicidin, streptothricin, and chlorophyll. A few interesting pages are devoted to the use of antibiotics in dentistry and oral surgery. An appendix discusses recent developments among antibiotics, including streptomycin and methods of prolonging absorption of penicillin so as to reduce the necessity of frequent parenteral administration.

Dr. Kolmer's volume is well documented, but his references are not as conveniently arranged as those offered by Herrell. The book is not as complete as Herrell's nor is it anywhere nearly as well illustrated. Neither volume is as satisfactory as that of Waksman for scientific information relating to antibiotics.

Such a vast amount of material is appearing on antibiotics that these summary volumes afford a helpful means of rapid orientation in the knowledge already available. In order to keep abreast of recent advances in antibiotics it is necessary, however, to continue to read current literature.

[2]**Diseases of the Thyroid Gland.** Presenting the Experience of More Than Forty Years. By Arthur E. Hertzler, M. D. Surgeon to the Halstead Hospital; Professor of Surgery in the University of Kansas. 495 illustrations. Cloth, 670 pages. Price, $8.50. New York and London, Paul B. Hoeber, Inc., 1941, second printing, 1942.

This monograph was first printed in 1941, which makes a review at this date rather difficult because considerable advance has since occurred. For example, there can be no discussion of the effect of the sulfonamides, para-aminobenzoic acid or thiouracil on the thyroid written in 1941.

The style is highly individualistic and, as so frequently occurs when such a style of writing is employed, the reader is not always certain as to the meaning. This monograph can be recommended only to those who can read it critically. The author probably intended it so, because he states in the preface: "This book is in no wise a treatise on diseases of the thyroid." Probably the title should more appropriately read: Observations and Impressions Gained through the Treatment of Certain Diseases of the Thyroid Gland.

[3]**Technical Methods for the Technician.** By Anson Lee Brown, A. B., M. D. Director of Dr. Brown's Clinical Laboratory and Dr. Brown's School for Technicians, Columbus, Ohio. Fabricoid, 706 pages. Price, $10.00. Third edition. Published by the Author, 1944.

This bulky volume contains over 700 pages of clearly written instructions to student technicians. The format is unusually attractive and all steps are lucidly delineated in traditional outline form, using numbers and letters. Occasional sections of questions provide several opportunities to review the major divisions of medical laboratory technology. Eleven excellent full color plates of blood cells enhance the value of the hematology section and partially atone for the relative dearth of illustrations.

Certain personal preferences in nomenclature and procedure are indulged in by the author, but these are not especially baffling to the pathologist. One readily recognizes the eosinophile even under the name "acidocyte", although he may not recognize the "Brown test," for syphilis, and he may ponder over "meniscocyte" and similar unusual terms. The hieroglyphics used in reporting urinalysis findings are amusing, but of little general value outside of the author's laboratory. In fact, the book is obviously written as an omnibus of instructions to students in Dr. Brown's School for Technicians, and finds its chief field of usefulness in that special niche. The recipe style of the book leaves little or nothing to the student's imagination or background, so that college preparation in the sciences is not one of the prerequisites for intelligent reading of this text. Presumably there is awareness of the need for such background, however, since Dr. Brown says (and the reviewer heartily agrees) that "There is nothing better than a good technician and nothing worse than a poor one."

Practically the entire material in the book is contained in some of the standard texts of approved laboratory procedures. The clearly written cookbook style of this tome, however, is not duplicated in many such works.

[2]Reviewed by Edgar J. Poth, M. D., Professor of Surgery, University of Texas School of Medicine, Galveston, Texas.
[3]Reviewed by John J. Andujar, M. D., Fort Worth, Texas.

DEATHS

Dr. Covert Ballejo Cooper of Arlington, Texas, died June 2, 1945, at his home, of myocardial failure.

Dr. Cooper was born in Grandview, Texas, August 28, 1888, the son of Dr. and Mrs. Samuell Morrison Cooper. His academic education was received in the Grandview Collegiate Institute, Austin College, and the University of Texas. His medical education was obtained in the Tulane University School of Medicine, from which he received the M. D. degree in 1911. His internship was served in the Touro Infirmary, New Orleans. He began the practice of medicine in Grandview, Texas, in 1913, where he was located until 1942, when he joined the medical staff of the North American Aviation plant at Grand Prairie, Texas. He had been in practice in Arlington since December, 1944.

DR. C. B. COOPER

Dr. Cooper had been a member of the Dallas County Medical Society, State Medical Association and American Medical Association. He was a member of the Phi Gamma Delta academic and the Phi Beta Pi medical fraternities. He was highly regarded by all who knew him.

Dr. Cooper was married in 1917 to Miss Zula Wilderson of Grandview. Of this union, he is survived by a daughter, Mrs. W. E. Halsted, New Orleans, and a son, Lieut. C. B. Cooper, Jr., A. A. F. Dr. Cooper was married to Miss Christine Ingle of Grandview, Texas, in December, 1927. Of this union he is survived by his wife and five children, all of Arlington.

Dr. John William Swindell of Greenville, Texas, died April 20, 1945, following an extended period of illness.

Dr. Swindell was born March 5, 1870, in a log cabin near Paragould, Arkansas. At the age of six he came to Texas with his parents and located at Merit, Hunt County. His academic education was obtained in the public schools. His medical education was received in the Memphis Hospital Medical College, Memphis, Tennessee, from which he was graduated in 1892. He began the practice of medicine the same year at Merit, Texas. In 1896 he removed to Greenville, where he specialized in eye, ear, nose and throat disease.

Dr. Swindell had been a member continuously since 1918 of the Hunt County Medical Society, State Medical Association and American Medical Association. He was a life member of the Greenville Masonic Lodge No. 335. He was also a Knight Templar and a member of the Knights of Pythias, and Woodmen of the World. He was a member of the Baptist Church. He was held in the highest esteem by all who knew him and especially by those he had served through long years of practice.

Dr. Swindell is survived by his wife, the former Miss Lula Ann Tucker, to whom he was married September 10, 1893. He is also survived by four sons, Dr. J. A. Swindell, Nacogdoches; Dr. R. R. Swindell, Amarillo; E. E. Swindell, Greenville, and A. C. Swindell, Dallas; one daughter, Mrs. J. V. Rowan, Dallas; a sister, Mrs. Lloyd Rowland, Greenville; a brother, Wade Swindell, Fort Smith, Arkansas; and two half-brothers, Claude Swindell, Lufkin, and James Swindell, Los Angeles, California.

Lt. (jg) Theodore R. Curby, M. C., U. S. N. R., of Houston, Texas, was killed April 28, 1945, in action in the Pacific theatre of war.

Dr. Curby was born April 11, 1920, in Maypearl, Texas, the son of Dr. and Mrs. John Henry Curby. His father has been practicing medicine in Maypearl for the past forty years. Lieutenant Curby's academic education was received in the public schools and Trinity University, then in Waxahachie, from which he was graduated with a B. S. degree. His medical education was obtained in Baylor University College of Medicine, from which he was graduated in March, 1944. He served an internship at the U. S. Naval Hospital, San Diego, California. He was assigned as medical officer aboard a destroyer in December, 1944, and saw combat service in the Iwo Jima and Okinawa campaigns.

DR. T. R. CURBY

Dr. Curby was a member of the Phi Beta Pi medical fraternity and of the Church of Christ. No finer eulogy could be paid him than the record of his supreme sacrifice in the service of his country.

Dr. Curby is survived by his wife, the former Miss Marjorie Moody, to whom he was married September 11, 1942. He is also survived by a son, Lloyd George; his parents, Dr. and Mrs. J. H. Curby, Maypearl, three sisters, Mrs. G. B. Doyle, Fort Worth; Mrs. L. L. Lowery, Dallas, and Mrs. C. H. Kizziar, Los Angeles, California; four brothers, Loyd Curby, Waxahachie; Edwin Curby, Dallas; Jack Curby and Marcus Curby, both of Houston.

Dr. John Richard Frazier of Fort Worth, Texas, died June 11, 1945, in a Fort Worth hospital, of uremia and myocardial failure.

Dr. Frazier was born December 8, 1861, in Kimball, Bosque County, Texas, the son of Emily Anne (Moore) and James C. Frazier. He moved with his family to Waco in 1871. His academic education was received in the old Waco University, now Baylor University, Waco, from which he was graduated in 1879. Immediately after his graduation from the Jefferson Medical College, Philadelphia, in 1884, he returned to Texas and began the practice of medicine, living at Waco and at Morgan. He was appointed chief surgeon for the Monterey and Gulf Railroad, Monterey, Mexico, and in 1901 became chief surgeon for the Vera Cruz and Pacific Railroad. Because of his knowledge of yellow fever, he was commissioned an honorary colonel in the Mexican army by Gen. Porfirio Diaz, president of Mexico, to aid in freeing Vera Cruz from the disease. In 1903, Dr. Frazier returned to Fort Worth, where he became the first company physician for Swift & Company. He was an organizer of Marine Lodge No. 330, Knights of Pythias and was the first chancellor commander. During World War I he served on a selective service board.

DR. JOHN R. FRAZIER

Dr. Frazier was a member for many years of the Tarrant County Medical Society, State Medical Association and American Medical Association. He had served as president of the old Fort Worth Medical Society, predecessor of the present Tarrant County Medical Society, and was president of the latter organization in 1907. He was a member of the Christian Church. Dr. Frazier was highly regarded as a citizen and physician during his many years of active practice.

Dr. Frazier was married December 18, 1888, in Waco to Miss Hallie Flint who preceded him in death May 10, 1913. He is survived by three daughters, Mrs. H. L. Goodspeed, Fort Worth, Mrs. C. B. Thirsk, Denver, Colorado, and Mrs. Mary Frazier McCurdy, Palm Springs, California; one son, John Frazier, San Francisco, California; two sisters, Fannie Moss and Wren Ansell; and two brothers, Tom Frazier and Frank Frazier.

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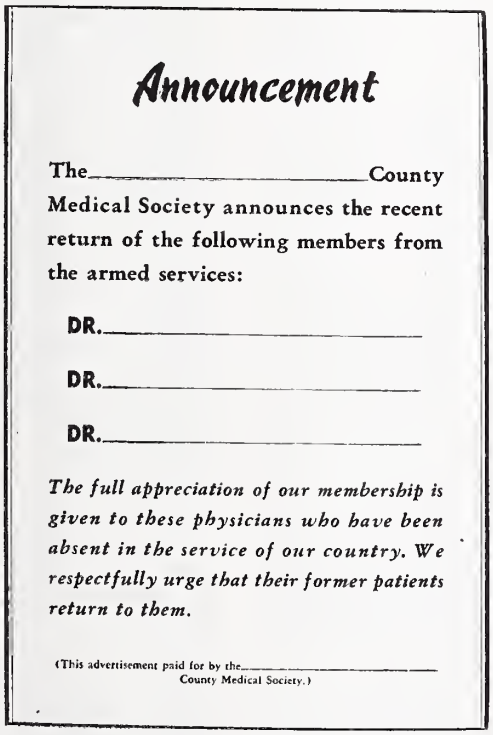
[1]Deceased.

Vol. XLI **September, 1945** **No. 5**

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

A Service In Appreciation of Returning Medical Officers has been recommended to county medical societies by the Public Relations Committee of the State Medical Association, which is believed will be warmly accepted and utilized. The placing in local newspapers of advertisements similar to the one featured here, paid for by the county societies, each week in larger cities or at appropriate intervals in small communities, will no doubt be deeply appreciated by medical officers returning to their homes to take up their civilian practices again, and will be met likewise with great favor from the public. It also will give medical societies an opportunity in a small way to compensate newspapers for the fine public service they render medicine complimentary on many occasions. It is understood, of course, that the advertisement shown here will be modified in verbiage or size as necessary, and that it will be published as often as necessary; it has been furnished to societies merely as a suggestion.



Announcement

The_____County Medical Society announces the recent return of the following members from the armed services:

DR._____

DR._____

DR._____

The full appreciation of our membership is given to these physicians who have been absent in the service of our country. We respectfully urge that their former patients return to them.

(This advertisement paid for by the_____ County Medical Society.)

On May 25, this year, the Public Relations Committee issued a news release to all Texas newspapers, both dailies and weeklies, with regard to postwar planning of the Association in behalf of the more than 2,000 Texas doctors soon to return home from the Armed Services. This release referred principally to the survey of the state being conducted by the Committee in cooperation with the Bureau of Information of the American Medical Association, regarding opportunities and desirable locations for practice, and all the factors pertaining thereto in which it was thought the returning medical officers would be interested. Announcement was made in this release that county medical societies would be asked to appoint committees to aid doctors returning from the Army and Navy in every way possible. It was suggested that efforts be made to provide returning medical officers with office space, and where needed, to help them secure medical equipment, which, under present conditions, is exceedingly hard to obtain. Editors of Texas newspapers gave this release wide publicity throughout the state.

Attention is called here to the very excel-

lent plans of the Dallas County Medical Society, as revealed in a letter to members from Dr. A. I. Folsom, chairman of a combined committee representing the Dallas County Medical Society, the Dallas Southern Clinical Society, and the Inter-City Urological Society. The letter follows:

"Three Committees, all having as a common aim the assistance of returning veterans, have met and formulated certain plans looking towards the assistance of those men in re-establishing themselves in practice in Dallas when they return.

"These Committees represent the Dallas County Medical Society, The Dallas Southern Clinical Society, and the Inter-City Urological Society.

"We had a very satisfactory meeting at which several matters were freely discussed and we are writing you this letter to give you the following information:

"The first need of the returning veteran is somewhere to practice medicine, and as most of you realize, the space, either in the Medical Arts Building or the Medical Dental Building in Oak Cliff, or in the outlying clinic buildings, is somewhat limited, and for this reason it is going to be necessary for all of us to do what we can towards helping make room for some of these men, at least temporarily, until a more adequate provision can be made for housing them.

"A Committee, headed by Dr. Alexander, has assumed the task of contacting all of the members of the Medical Society in the Medical Arts Building with the idea of asking them if it is possible for them to rearrange their space in any way so that they might accommodate one or more of these men who are returning. This accommodation might occur in two ways: either by giving up a room which is now used, and which probably will not be as badly needed when practice is reduced as a result of the close of the war; or second by allowing them to occupy your office, or a portion of your office, during some hours of the day when you do not happen to be there.

"We feel that this is an obligation which we owe these men, and that we should take very seriously, and therefore as Chairman of this joint committee, I am asking you to be thinking over this plan, so that when the representative of that committee contacts you, you may have some very definite idea as to how you can assist us in housing men as they return.

"The second thing that was taken up by the committee was the matter of financing these men who may be in need of some additional funds to reestablish themselves in practice. Dr. Cary has assured us that he will contact the presidents of the banks of the city and the arrangement will be made so that if this joint committee, for which I am speaking, recommends this man for credit to the bank, he will be extended credit on the same basis that anybody else is, and that is at a reasonable rate of interest of 4, 4.5, or 5 per cent.

"The third thing which we are planning to do is to try to make some arrangement whereby the County Society may act as an agent for the distribution of surplus medical equipment which may be turned loose, so that these men may be able to procure the equipment that they need without paying exorbitant price for it.

"The fourth thing which we are planning to do is some kind of an advertising campaign, which was originated really in the Inter-City Urological Society, where we planned to carry an ad in the daily papers for a while, naming the men in urology who are in the service, and asking their patients, who had, by necessity, come to those of us who stayed, to return to them as patients. And also asking the doctors who had been accustomed to referring cases to them before they went into the service, but who were necessarily now referring their cases to us, to resume the practice of referring their urological cases to them.

"In addition to this, we decided that we would have in our office reception rooms a fairly good sized card, large enough to be distinctly read entirely over the room, in which we make the same statements. These ads, either in the paper or in the office, will not be signed by any individual member of the Urological Group, but simply as the Inter-City Urological Association.

"As chairman of this combined committee, I want to ask you for any suggestions looking forward toward the better crystalization of a better plan, and I also want to ask your very hearty cooperation in the matter of assisting us in the matter of space."

The suggestions contained in the above letter are commended to the consideration of county medical societies throughout the state. Now is the time to show materially our great appreciation for the sacrifices and services of our members in the Armed Services, who are now and will be returning home to take up again the threads of their civilian lives. We cannot do less than has been suggested here.

Speakers Bureau Formed to Again Combat Socialized Medicine.—It will be recalled that in the last session of Congress, when Senators Wagner and Murray and Representative Dingell introduced their first bills to socialize medicine, a speakers bureau was formed covering the fifteen Councilor districts of the Association. Members of that bureau functioned effectively in addressing lay organizations throughout the state, such as Rotary, Kiwanis, Lions, and other civic clubs, Parent-Teachers organizations, Women's Clubs, American Legion Posts, and similar representative organizations. The result was an arousal of public opinion which reached the halls of Congress and doomed to obscurity the initial effort to regiment medical care in the United States.

Again, with American medicine strained to its uttermost to render medical care at home and to service men and women in far corners of the earth and at sea, comes the challenge and threat to shackle the public and medicine under the guise of social security.

There is published elsewhere in this number (page 266) the list of speakers who will serve as members of the Bureau during the present emergency. These speakers were selected by the Councilors of their respective districts. Officers of county medical societies have been notified that a list of these speakers will be published in this number, and have been urged to seek engagements for them before lay organizations in the areas under their jurisdiction. They have been advised, of course, that they are free to select other speakers if they choose and especially from

the ranks of qualified laymen who are agreeable to render this important service to the public welfare.

The Public Relations Committee has assembled packages of material which will be made available to any speaker called on for an address on the subject of socialized medicine. These packages may be had on request to the Committee at the Central Offices of the Association, 1404 West El Paso Street, Fort Worth. They are available to members of the Woman's Auxiliary or to lay speakers, as well as our own members.

The challenge to socialize medicine in the United States must and will be met.

Texas Child Health Council.—An organization under this name was perfected at Galveston, Texas, August 12, 1945. The organization is exactly what its name implies, a council. Further, it is a council not on child welfare, children's diseases, or any other phase of child life, but, rather, upon child health. For these reasons there is a distinction and a difference between this organization and the multitude of other organizations on the surface apparently of the sort. It seemed to those present at the organization conference that while the group which it was expected would be assembled under the banner of the new organization, would be made up of strictly those concerned with the health of the child, it was anticipated and so stated, that the other features of child life, such as are included under the general term, "welfare," will certainly not be neglected. It has happened all too frequently in our striving for abolition of disease and physical and mental disorder of a great variety, that we go off on the welfare tangent to the neglect of the medical features of the incident enterprise. It is not a long step from that to dominance by generally well-meaning, but frequently misguided laymen, professional welfare workers in particular. That may not be too bad, but certainly it is not too good. Therefore, the Texas Child Health Council.

The personnel of the first council comprised those who attended the first conference. It is as follows:

Dr. Frank Lancaster, Texas Pediatric Society; Dr. John Ashby, American Academy of Pediatrics; Dr. Holman Taylor, State Medical Association of Texas; Dr. Fred P. Helm, Texas State Board of Health; Dr. T. J. McElhenny, American Academy of Pediatrics, Texas Section; Dr. J. H. Parks, Jr., Baylor Medical School, Department of Pediatrics; Dr. H. L. Moore, Southwestern Medical College, Department of Pediatrics; Dr. Chauncey D. Leake, Dean of the University of Texas School of Medicine; Dr. F. Elliott, Dean of the University of Texas School of Dentistry; Dr. Boyd Reading, University of Texas School of Medicine, Department of Pediatrics; Dr. G. Decherd, Director, Postgraduate Education, University of Texas School of Medicine, and Dr. A. E. Hansen, Director, University of Texas Child Health Program.

Unable to be at the Conference, but presumably considered a part of the personnel of the Council, were Dr. C. O. Terrell, Regent of the University of Texas, who was invited as a representative of pediatricians at large; Dr. Robert Sutherland, Director of the Hogg Foundation, and Dr. W. Buckner, Dental Consultant of the Maternal and Child Health Division of the Texas State Board of Health.

The functions of the Texas Child Health Council, as set up at the first meeting, are as follows:

(1) Correlate, encourage, and initiate activities which concern the medical and dental aspects of the child health problem in Texas, recognizing the essential and necessary leadership of physicians and dentists in these matters.

(2) Integrate pediatric meetings and conferences, and foster special ones.

(3) Stimulate investigative activities. (a) Clinical problems, and (b) fundamental research.

(4) Aggressively cooperate in programs pertaining to child health carried on by professional, semiprofessional and lay groups, under the leadership of physicians and dentists.

(5) Point out present unsatisfactory status of hospital facilities for children in Texas and institute measures to improve these conditions.

(6) Cooperate with the State Board of Health in reducing child mortality and the high incidence of preventable children's diseases.

(7) Assist in promoting more effective pediatric training programs for Texas pediatricians, general physicians, and others concerned with child health.

As soon as possible, a constitution and bylaws, or something by which the organization may be properly guided, will be arranged, and doubtless the representation on the Council will be extended to include other strictly medical organizations and, perhaps, under provisions consistent with the fundamental principles of the organization, lay and mixed lay and professional organizations having to do with all phases of child health and welfare.

A notable feature of the plans of the new organization, is the practical recognition of the part the dentist plays in the matter of child health. The average layman, and sometimes even the doctor, thinks that the whole function of the dentist in connection with the health of the child, is to pull some teeth, and see that succeeding teeth start going in the right direction. Occasionally, it is expected that other dental interventions will be incurred. The new organization plans to coordinate better the instruction of the dental student and the medical student, as well as the practicing members of the two closely related professions. It also plans to initiate such expedients as will tend to insure proper pediatric training of the medical student and the general practitioner, in addition to improving the knowledge and skill of the pediatrician. It is important, at least in a very large section of our own State, and perhaps elsewhere, that the physician engaged in general practice know a lot of pediatrics. The

pediatricians have been the first to call attention to this need. To this end, the Wm. Buchanan Foundation is supporting a well planned and elaborately set up conference in Pediatrics, to be held under the joint auspices of the University of Texas Child Health Program, and the Maternal and Child Health Division of the Texas State Board of Health, at Galveston, November 12-17 (referred to elsewhere in these columns). Other such conferences will be held as between the strictly professional groups, and, perhaps, now and then, all who are interested, whether lay or professional.

University of Texas Postgraduate Course. Announcement is made here of the following postgraduate courses planned for the month of November by the University of Texas School of Medicine, Galveston:

1. *Internal medicine*, November 1-3. Dr. George Fahr, professor of medicine, University of Minnesota School of Medicine, will be one of the guest speakers.

2. *Conference in pediatrics*, under the joint auspices of the University of Texas Child Health Program and the Maternal and Child Health Division of the Texas State Board of Health, tentatively set for November 12-17. Guests will be Dr. Alton Goldbloom, associate professor of pediatrics, McGill University; Dr. Clifford G. Grules, Rush professor of pediatrics, College of Medicine, University of Illinois, and editor-in-chief of the *American Journal of Diseases of Children;* Dr. Joseph A. Johnston, pediatrician in chief, Henry Ford Hospital; Dr. Rustin McIntosh, professor and head of the Department of Pediatrics, College of Physicians and Surgeons, Columbia University; and Dr. Irvine McQuarrie, professor and head of the Department of Pediatrics, University of Minnesota School of Medicine.

3. *Surgery*, including general and special fields and anesthesia, October 22-26. Detailed plans will be announced later.

4. *Obstetrics and gynecology.* A week's refresher course is planned for the early winter.

Physicians in Texas interested in registering for the course in medicine or surgery are invited to communicate with the Director, Postgraduate Division, University of Texas School of Medicine, Galveston. Those desiring registration in the pediatric conference should write Dr. Arild E. Hansen, Director of the Child Health Program, University of Texas School of Medicine, Galveston. Present Federal regulations necessitate limitation of registration in each course to fifty physicians.

Another Library Donation.—Receipt is acknowledged here, with expression of appreciation for the Association, of a donation on August 9, 1945, of $25 to the Library, by Dr. E. V. De Pew of San Antonio. The donation was made by Dr. De Pew in memory of the late Dr. Harry H. Brown, Sr., of Yoakum.

This donation will be added to the "County Medical Society Library Endowment Fund," which now totals $450. That fund will be invested by the Trustees and only the interest therefrom will be expended each year, thus perpetuating it. The time is not far distant when the constant growth of the Library will make necessary the construction of a fireproof, modern building in which to house it. The Trustees may elect to use this particular fund for that purpose. If so, from fifty to one hundred thousand dollars may be required, and it is hoped that county medical societies and individual members will give consideration to the constant building up of this fund for that purpose. No more valuable support could be rendered the Association in any way, and for the benefit of its members in scientific and cultural advancement.

The Library Endowment Committee and the Trustees commend and thank Dr. De Pew for his gift.

The Judson L. Taylor Foundation was recently established in memory of the late Dr. Judson L. Taylor, of Houston, seventy-eighth president of the State Medical Association of Texas, who served during the administration year 1942-1943. The purposes of the Foundation are: (1) To provide fellowship whereby selected young surgeons who have completed their internships may be given advanced training in surgery; (2) to provide lectures by outstanding members of the medical profession on surgical subjects; and (3) to provide awards for outstanding achievements in or contributions to the practice of surgery. The funds of the Foundation are to be derived from donations from friends, former associates, and patients of Dr. Taylor who desire to express their appreciation of him by thus perpetuating his memory in the advancement of surgical science, which he loved and to which he contributed much during his life. Donations to the Foundation will be deductible from Federal income taxes in amounts not exceeding 15 per cent of the gross income.

Friends and former associates of Dr. Taylor who wish to pay tribute to his memory by contribution to the Foundation in his name should send such contributions to the Judson L. Taylor Foundation, 229 Medical Arts Building, Houston 2, Texas.

CURRENT EDITORIAL COMMENT*

Microfilm for Hospital Records.—A recent editorial in *Modern Hospital*[1] urges hospital administrators and record librarians to put their records on microfilm. It should be

*This department of the JOURNAL presents editorial comments on current items pertaining to the science, art and practice of medicine, contributed by members of the State Medical Association and scientists closely associated with the medical profession of Texas. Invitation is hereby extended to any member of the State Medical Association of Texas to submit such discussions for this department. The discussions should not be more than 500 words in length.

pointed out that in spite of the successful use of this film for V-Mail and other purposes, there are many unsolved problems in connection with its use for hospital records. Microfilm of large collections of records to which nothing more will ever be added, such as those of persons who have died, present relatively few problems. They can be photographed at a cost somewhere between $2.00 and $3.00 per thousand pages for film, developing, camera rental, and labor. In addition there is the labor cost of getting the records in order, removing any fasteners by which they may be bound, and straightening the sheets so that no part of the writing will be covered by folded edges. They must be arranged according to their serial numbers or in some other logical order so that the film can be adequately indexed. After the film has been checked for imperfections, the original records may be destroyed, as the courts will accept films as evidence.

In a hospital doing a considerable amount of research work, however, there arises the problem of extensive reading of these films. The rental of a reading machine is not expensive, and the legibility of the film is nearly, if not quite, as good as the original. Staff members cannot be expected to like the reading machine at once, partly because they are unaccustomed to it, and partly because a certain amount of practice is needed before visual fatigue can be overcome just as in learning to use a microscope. The record librarian should have an experienced person available to place the film on the machine, find the necessary records, and perhaps do some of the reading for the doctor if he wishes.

In hospitals using the unit number system and having many readmissions, there is another problem which has not as yet been satisfactorily solved. If the record has already been put on film when the patient is readmitted, how is the additional information to be filed? To be sure, the film can be cut and a new portion spliced in, but because of the labor involved, this process may become too expensive to be practical. All such additions can be photographed in serial order at the end of each year and placed in a supplementary file. A notation must then be made in the original index, and also a scratch or punch mark placed on the photograph of the last page of the original record to show where the addition is filed. When several repeated admissions occur, this system also becomes impractical. Another way is to cut the film in strips and staple these strips in cardboard windows, but no suitable equipment is as yet commercially available, and a specially built reading machine would be necessary. Perhaps the most hopeful method is based on the possibility that an apparatus will appear on the postwar market capable of photographing all pages of each person's record on a sheet of film. For example, ten rows of five exposures can be placed on a sheet which would fit a 4 by 6 inch card file. The additions could be photographed on similar sheets and placed in the same folder.

Even if some mechanical solution is reached, the librarian will still be faced with difficult decisions. Should each addition be photographed before the record is refiled? Or should some kind of index be kept of records to which additions are made, and all of these pulled from the files and photographed at the end of a year?

All signs point to a great expansion in the microfilm industry immediately after the war. To date, the manufacturing and distributing companies have been most interested in the business of banks and other concerns where problems such as those mentioned above do not arise. The salesmen of these companies have done their best to solve the problems of institutions, but they admit that the designers have not yet attempted the solution of such problems. Perhaps the postwar competition will force some companies into this new field, or it may be that record librarians, hospital administrators, and others with similar problems will be able to find their own solution.

REFERENCES

1. Let's Microfilm Now, Mod. Hosp. 64:42 (June) 1945.

J. Allen Scott, M. D.
Associate Professor of Statistics and Epidemiology, University of Texas School of Medicine, and Consulting Statistician, John Sealy Hospital, Galveston.

PENICILLIN IN HUMAN PSITTACOSIS

The first successful use of penicillin in the treatment of human psittacosis, an infectious disease of parrots which is transmissable to human beings, is reported by three Philadelphia physicians—Harrison F. Flippin, Michael J. Gaydosh and William V. Fittipoldi—in the May 26 issue of *The Journal of the American Medical Association.*

The doctors report the case of a 52-year-old woman who contracted the disease after being bitten on the finger by a parrot. She suffered a migratory type of pneumonia which failed to respond to the sulfonamides. Penicillin treatment was instituted on the nineteenth day of illness, and there was a definite improvement within thirty-six hours.

The disease, caused by a virus, was practically unknown in this country until a number of cases were reported in 1929-30. The majority of patients at that time gave a history of close contact with parrots or with sick love birds. It is believed that the infection incurs by inhalation. The mortality rate in different outbreaks has averaged about 20 per cent.

ANATOMICAL AND MECHANICAL ASPECTS OF TREATMENT OF FRACTURES OF THE FOREARM

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SAN ANTONIO, TEXAS

The earliest known splints were used for the treatment of a fractured forearm in an Egyptian mummy 5000 years old discovered at Naga-ed-der (Fig. 1*a*). The splints consisted of strips of wood wrapped in linen and padded with coarse grass. Then as now the forearm was vulnerable because it was used to parry blows and to protect the body in falls. In all the older surgical works the treatment of these fractures received much attention because of their frequency and potentially disabling after-effects (Fig. 1*b*).

The forearm has always been the commonest site of fractures in the body and consequently deserves the most consideration in any study of fracture treatment. Moreover, exact replacement of fragments is more essential in the forearm because of the importance of proper function in the elbow and wrist joints and preservation of the rotatory motions. In addition, there are more opportunities for mal-union and non-union of fractures in the forearm because of the various muscle forces involved and the difficulty of dealing with injuries of two parallel bones.

The ulna articulates with the humerus at the elbow and is a continuation of that bony framework of the upper extremity. The radius articulates with the hand and serves as the bony support for that member. The ulna is longer than the radius and articulates with it at each end. These structural features permit great mobility of the forearm while at the same time providing relatively stable support to the hand. On the other hand, this rather complex musculo-skeletal mechanism makes for difficulty in reducing fractures of the forearm and proper fixation after reduction.

FRACTURES OF THE OLECRANON

The olecranon is rarely fractured in children because it is short and thick and consequently stronger than the lower end of the humerus which is commonly fractured. In adults it is fractured by direct falls on the tip of the elbow, by side-swipe automobile accidents, but more often by falls on the outstretched hand. In falls with the elbow slightly flexed, the triceps is tense and the olecranon is snapped over the articular surface of the humerus (Fig. 1*c*).

The fractured fragments may vary from a small chip at the site of the triceps attachment to a piece which includes the entire articular surface of the olecranon. It is often comminuted. The amount of displacement is very variable and depends upon the opposing pull of the triceps tendon and the strong fascial covering of the olecranon.

The treatment of fractures of the olecranon is directly related to the size of the fragments, the degree of comminution, and the amount of separation. In fractures without separation of the fragments all that is needed is a cast from the axilla to the wrist to support the elbow in an extended position. In such a cast, the patient is more comfortable if the elbow is flexed fifteen or twenty degrees so that the cast does not drag on the wrist.

If the proximal fragment is a small piece separated from the distal fragment, it is better to remove it and suture the triceps tendon directly to the ulna. The same applies for olecranon fractures in very old patients. After excision of the fragment a cast is needed only ten days, after which gradually increasing passive exercises can be undertaken.

If there is a large proximal fragment which is separated, it must be replaced exactly in order to restore the contour of the articular surface of the olecranon. It can be secured by drill holes in each fragment through which a loop of wire is passed. Sometimes a catgut suture under the triceps tendon and through a hole in the distal fragment is sufficient (Fig. 1*d*). I have occasionally drilled two Kirschner wires through the proximal fragment and into the shaft to hold the fragments. The wires are removed after the fracture is healed. More exact reposition and fixation can be obtained by placing a long vitallium screw through a slit in the triceps tendon, the proximal fragment and into the shaft of the bone. After any of these procedures, the elbow should be placed at right angles and a cast applied from the axilla to the base of the fingers. The cast should be left in place for approximately five weeks after which it can be discarded and exercises begun.

FRACTURES OF THE UPPER THIRD OF THE ULNAR SHAFT

Fractures of the upper third of the ulna are produced by direct blows on the bone and are as a result usually compounded. If the displacement is slight there is no accompanying injury to the radius. More often, however, the ulna is displaced anteriorly, the orbicular ligament about the neck of the radius is torn, and the head of the radius is dislocated. (Fig 1*e*.) This possibility should be borne in mind in the examination of all fractures of the ulna. Such injuries have been called "Monteggia's fractures" because of his description of the lesion in 1814.

Read before the Section of Bone and Joint Surgery, Southern Medical Association, St. Louis, Mo., Nov. 13, 1944.

Monteggia fractures in the upper third of the ulna with dislocation of the head of the radius require reduction of the dislocation as well as fixation of the fracture. The dislocated radial head can usually be reduced by direct pressure over it and supination of the forearm. Acute flexion of the elbow then holds the head and prevents re-dislocation. This maneuver, however, cannot be depended upon to reduce the ulnar fracture, especially if there is any overlapping. More often there is a tendency to radial deviation of the proximal ulnar fragment and this is not overcome even by wiring the fragments together. The most ideal fixation of the ulna is obtained by applying a vitallium plate across the fracture, which preserves the exact reposition of the fragments. Then the radial head can be reduced and the elbow held in forty-five degrees flexion while a cast is applied from the axilla to the base of the fingers. Such a cast should be left on the extremity two months before any extension exercises of the elbow can be begun. In rare cases, the head of the radius is not held in position by acute flexion of the elbow and supination of the forearm. When this occurs it is necessary to repair the orbicular ligament by passing a loop of fas-

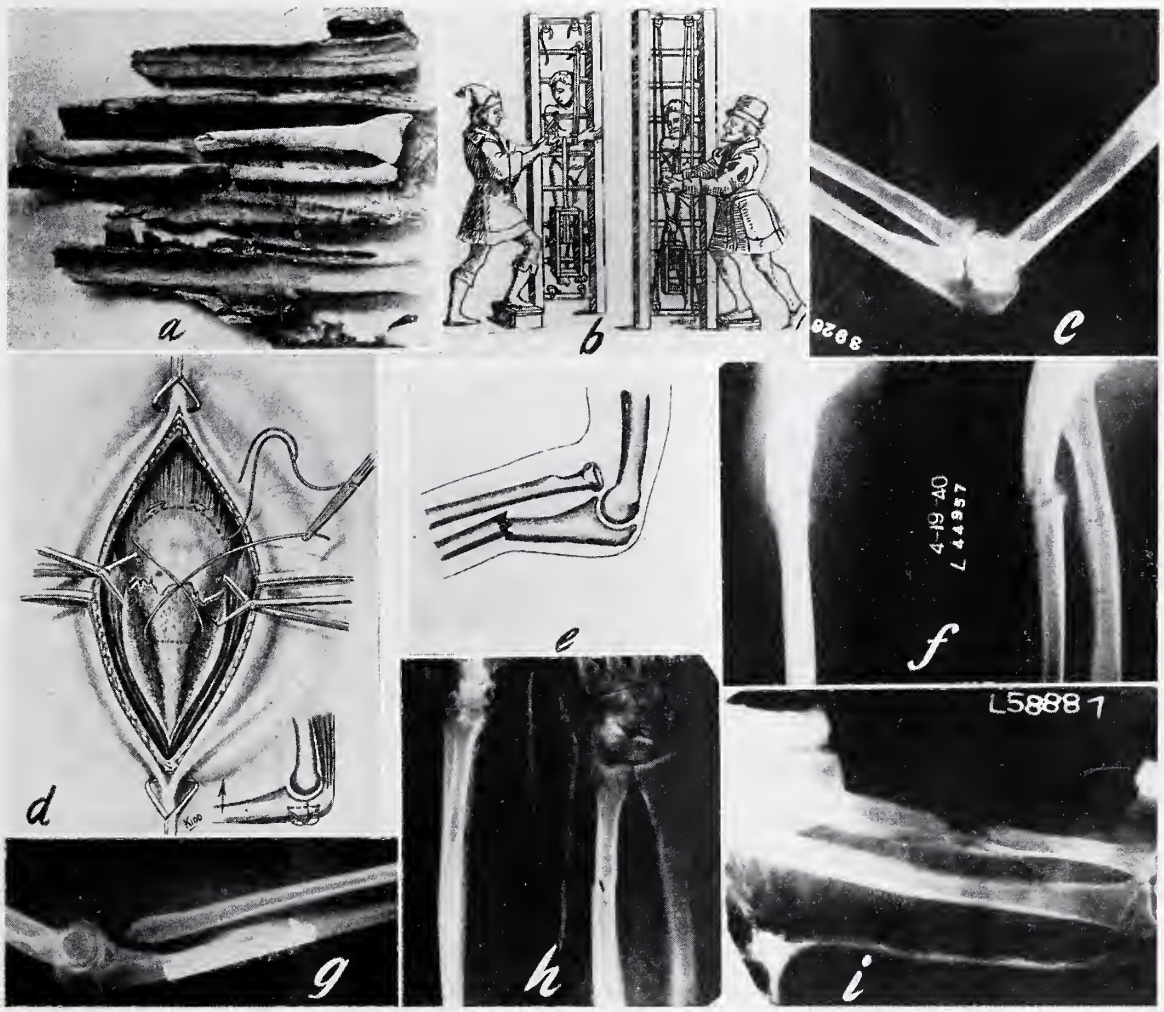

FIG. 1a. The earliest known splint found on an Egyptian mummy at Naga-ed-der. A fracture in the middle third of the forearm was splinted with strips of wood padded with grass and bound with linen (From Smith[23]).

b. The "Scammon" of Hippocrates used for reducing fractures of the forearm. Powerful traction was gained by the windlass attached to the ladder.

c. Typical fractures of the olecranon in an adult resulting from a fall. The bone is snapped over the lower end of the humerus.

d. Watson-Jones method of suturing a fractured olecranon. The suture is passed through a hole in the olecranon below and the triceps tendon above and is crossed over the fracture line to prevent angulation of the fragments (From Watson-Jones[26]).

e. "Monteggia fracture" of the ulna with forward dislocation of the head of the radius (From Watson-Jones[26]).

f. Fracture of the shaft of the ulna alone without dislocation of the radial head. Closed reduction and cast fixation resulted in solid bony union in good position.

g. Old Monteggia fracture with unreduced radial dislocation and non-union of the ulna successfully treated by resection of the radial head, bone graft to the ulna and application of vitallium plate.

h. Fracture of the shaft of the ulna alone treated by manipulation, engagement of fragments and application of cast.

i. Gunshot fracture of the ulna with comminution treated by manipulation and "rocking" of the hand on the intact radius. Gunshot fractures of the forearm rarely involve both bones.

cia about the neck of the radius and anchoring it to the ulna. (Fig. 1*g*.)

Especially careful treatment of Monteggia fractures is essential to forestall such serious complications as non-union of the ulna, redislocation of the radius, stiffness of the elbow, or ankylosis of the radio-ulnar joint. Therefore in any fracture of the upper third of the ulna, roentgen examination must include the elbow to make certain that radial dislocation is not overlooked.

FRACTURES OF THE ULNAR SHAFT ALONE

Since the ulna is subcutaneous throughout its entire length, it is easily fractured by direct blows as in throwing up the forearm to parry an attack. The ulna is never fractured in falls on the outstretched hand because such forces are always transmitted from the hand to the radius. Also because it is subcutaneous, ulnar fractures are often compounded. When the ulna alone is fractured and there is displacement of the fragments, roentgenograms should include the elbow and wrist to make certain that injuries to the superior and inferior radio-ulnar articulations are not overlooked.

The ulna is usually fractured in its lower half because of the relative slenderness of this portion of the bone. Ulnar fragments are seldom displaced by muscle pull and for that matter are overlapped only when the superior or inferior radio-ulnar articulations are damaged.

Ulnar fractures without displacement are treated by a cast from the axilla to the base of the fingers with the elbow flexed to a right angle and the wrist in the dorsiflexed position. The wrist and elbow must be immobilized to prevent rotation of the ulnar fragments and consequent shearing of the healing callus. After three weeks, the long cast can be replaced by a cast from the elbow to the base of the fingers, which should be worn for another three weeks. When this cast is removed, the fracture can be tested for motion or tenderness and, if they are present, another cast applied until healing is completed. *Union is not complete as long as there is tenderness over the fracture site.*

Ulnar fractures with displacement or comminution should be manipulated by direct pressure until the fragments are in satisfactory contact. With general anesthesia, direct traction is made on the hand or the hand is "rocked" medially on the intact radius to give longitudinal traction. If the fragments can be engaged this is usually all that is necessary. (Fig. 1*h* and *i*.) If they cannot be secured properly, the fracture should be exposed and the fragments fastened with a vitallium plate and screws. Afterward a cast is applied from the axilla to the base of the fingers for eight weeks.

FRACTURES OF THE ULNAR STYLOID

A patient with a "sprained wrist" after a fall on the outstretched hand is likely to have a small fragment fractured off the distal end of either the radius or the ulna. The styloid process of the ulna is easily broken off if the force of the fall is on the hypothenar eminence of the hand. In case of doubt, a roentgenogram of the wrist should always be made to prevent inadequate treatment.

Fractures of the ulnar styloid are best treated by manipulating the hand into a position of ulnar deviation and dorsiflexion, after which a cast is applied from the elbow to the base of the fingers. Such a cast should be worn six weeks. After its removal, the styloid should be tested for tenderness to determine if longer immobilization is necessary.

Old ununited fractures of the ulnar styloid are sometimes followed by persistent pain and weakness of the wrist. Removal of the fragment may relieve the pain but there is always some residual disability of the wrist.

FRACTURES OF THE RADIUS

HEAD AND NECK

The head of the radius is fractured by falls on the outstretched hand in which force transmitted through the radius causes an impaction of the head against the lower end of the humerus. The fracture may vary in extent from a small chip off the side of the head to a complete separation of the head from the end of the shaft. When there are radial cracks in the head, it is advisable to make several roentgenograms from different angles to determine the extent of injury since it is often more than can be seen in one view. Moreover, even in x-ray studies the damage to the cartilage of the capitellum of the humerus and the radial head cannot be adequately demonstrated.

Fractures of the neck of the radius are less common and may be impacted with the head depressed distally or they may be transverse with displacement of the head. In children there is a form of greenstick fracture of the neck in which the epiphysis, the epiphyseal cartilage and a fragment from the diaphysis are broken off and displaced laterally.

Simple cracks in the head of the radius are best treated by the use of a sling for two or three weeks. Even so, the damage to the articular cartilage causes delay in recovery of the elbow motion and there may be some persistent restriction of motion.

Marginal fractures of the head with displacement may require removal of fragments or of the entire head. If fragments are not removed the head becomes deformed and ro-

tation of the forearm is permanently limited.

Comminuted fractures of the head should be treated by removal of the entire radial head and smoothing the neck before covering it with soft tissue. This decreases disability and hastens recovery of joint motion. In children, however, the head should not be removed unless there is extreme displacement of fragments with no hope of satisfactory replacement.

Fractures of the neck of the radius can sometimes be reduced by direct manipulative pressure followed by immobilization of the elbow in acute flexion. Gentle motion should

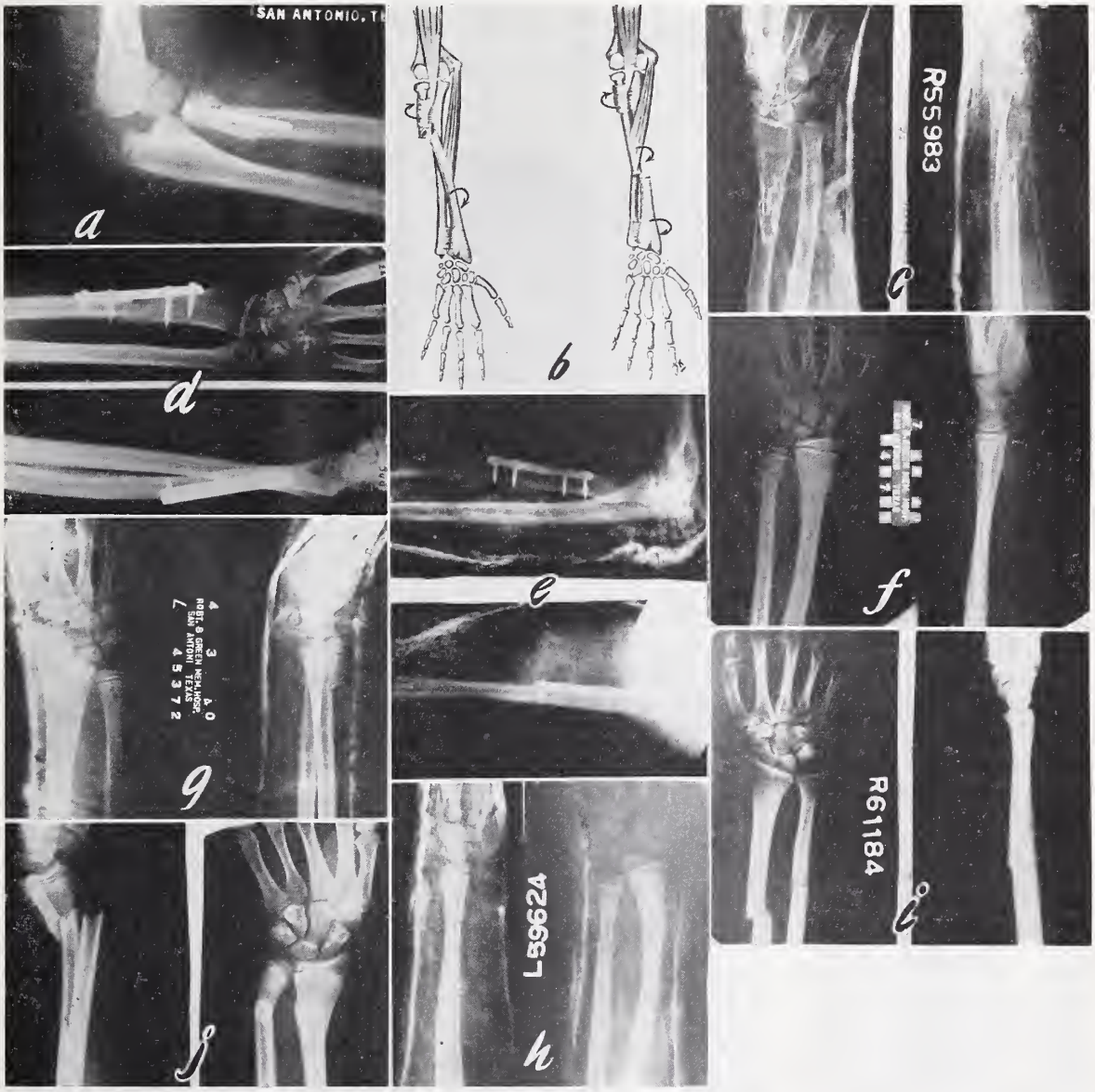

FIG. 2a. Fracture of the neck of the radius in an 8-year-old boy with wide displacement of the head. Head replaced and secured by passing vitallium screw through it into the shaft of the bone. With such fixation no external splints were required.

b. Drawing showing how pronator teres muscle displaces distal fragment when fracture is proximal to the insertion of the muscle. When fracture is distal to the insertion of the pronator teres muscle fragments move together and are less likely to be displaced (From Watson-Jones[26]).

c. Comminuted fracture of the radius alone held in satisfactory position by manipulation and "rocking" the hand on the intact ulna.

d. Oblique fracture of the shaft of the radius which could not be engaged by closed reduction. Fragments held in normal position by vitallium plate and screws.

e. Oblique fracture of the upper third of the shaft of the radius held in normal position by vitallium plate and screws.

f. "Torus" or compression fracture of the lower end of the radius in a 10-year-old child. Note bulging of the cortex at the fracture line.

g. More extreme type of "torus" fracture in a child with "buckling" on the dorsal surface.

h. Greenstick fracture of both bones of the forearm perfectly reduced by direct traction and pressure over the angulation.

i. Fracture of both bones of the forearm reduced by angulation and engagement of the fragments. Solid bony union has taken place in good position.

j. Typical fracture of both bones of the forearm with displacement of fragments, overlapping and dorsal angulation.

be begun in two weeks to prevent adhesions and restriction of joint motion. Fractures of the neck with displacement of the head usually require removal of the head. Again in children the head and neck of the bone should not be excised but should be replaced and sutured in their normal position. (Fig. 2*a*.)

The decision to remove the radial head should be made in the first few days after the accident before healing of the fracture begins. Moreover, the head should be removed by sharp dissection and the end of the neck made smooth to prevent excess bone formation and later limitation of elbow motion. Removal of the radial head in children results in shortening of the radius and, as the ulna increases in length, the hand is deflected to the outer side of the wrist. Even in adults, a minimum of bone should be excised to prevent proximal displacement of the radial shaft. In making the incision for the removal of the radial head it must be borne in mind that the posterior interosseous branch of the radial nerve winds around the neck of the radius about one-half inch below the head. If this nerve is injured in the operation, paralysis of the extensor muscles of the wrist and fingers will result.

After removal of the head of the radius no external fixation of the elbow is required except possibly a sling for a week or two. Early motion and exercise are essential to recovery of normal joint functions. If the radial head is not removed cleanly, there is a strong tendency to new bone formation about the end of the radial shaft which impedes recovery.

FRACTURES OF THE RADIUS ALONE

Isolated fractures of the shaft of the radius are rare because the lower end of the bone is fractured at the wrist more often than is the relatively strong shaft. Falls on the hand are transmitted directly to the radius and this is the most frequent cause of fracture. Unlike the ulna, fracures of the radius are subject to displacement from muscle pull and the fragments are frequently overlapped. In fractures above the insertion of the pronator teres muscle, the proximal fragment is supinated by the biceps and drawn forward while the distal fragment is pronated by the pronator teres and pronator quadratus muscles, and is drawn inward toward the ulna. In fractures below the insertion of the pronator teres muscle, the proximal fragment is drawn forward and inward by the biceps and pronator teres muscles but it is not supinated. The distal fragment is displaced toward the ulna by the pronator quadratus and the supinator longus muscles. (Fig. 2*b*.)

If there is overlapping of the radial fragments, it generally means that the inferior radio-ulnar articulation is dislocated. Consequently, roentgenograms of the forearm should include both bones throughout their entire length to forestall overlooking articular injuries.

From the foregoing it can readily be seen that manipulations to reduce fractures of the radius alone must take into consideration the various forces which caused the displacement if good reposition is to be obtained. Moreover, it must be remembered that in the lower third of the shaft of the radius non-union is more likely to occur and exact reduction and complete immobilization are essential. The hazards presented were well described by Benjamin Bell 150 years ago: "In this situation it is important to distinguish whether both bones or only one of them is fractured for much attention is required to prevent the stiff uneasy state of the arm from continuing long after the bones are united; patients indeed often complain of this in some cases during life. I think it more frequently happens when the radius is broken by itself than when the ulna only is fractured."

In children, fractures of the shaft of the radius are generally greenstick in type without displacement and can be reduced by direct pressure to correct the angulation. A cast is then applied from the axilla to the base of the fingers with the elbow flexed to right angle and the forearm in mid-position. Immobilization should be continued for six weeks in such a cast to prevent rotation of the radius with consequent strain on the healing fracture.

Fractures of the shaft of the radius above the insertion of the pronator teres muscle require that the forearm be supinated to bring the fragments into apposition. If traction is needed, the hand can be "rocked" on the intact ulna to gain a longitudinal pull on the radius. Direct pressure in the interosseous space will separate the bones and overcome the tendency to ulnar deviation of the radial fragments. A cast is applied from the axilla to the base of the fingers with the elbow flexed to right angle, the forearm supinated, and the hand deflected to the ulnar side. The cast is worn for six weeks. After its removal, if the fracture site is tender or if there is any motion between the fragments a similar cast should be reapplied for another two weeks.

Fractures of the shaft of the radius below the insertion of the pronator teres muscle require less supination of the forearm to reduce the fragments. Usually reduction can be maintained by immobilizing the elbow at right angle and the forearm in the mid-position between pronation and supination. (Fig. 2*c*.) As stated before, fractures in the lower

third of the radius must be replaced exactly if rotation function of the forearm is to be preserved. The immobilization by a cast follows the course set out in the preceding paragraph.

In rare instances it is impossible to reduce fractures of the shaft of the radius without making an incision over the fracture and levering the fragments into position. After this, transverse fractures will engage and remain so while a cast is being applied. Oblique or comminuted fractures will not become interlocked and may require fixation with a loop of wire or a short vitallium plate and screws. It must be emphasized that internal fixation of such fractures is rarely necessary. (Fig. 2*d* and *e*.)

FRACTURES OF BOTH BONES OF THE FOREARM

Fractures of both bones of the forearm usually follow falls on the outstretched hand and are more frequent in children. The distal fragments are generally displaced dorsally with seldom much displacement or overlapping. The bones are generally fractured at

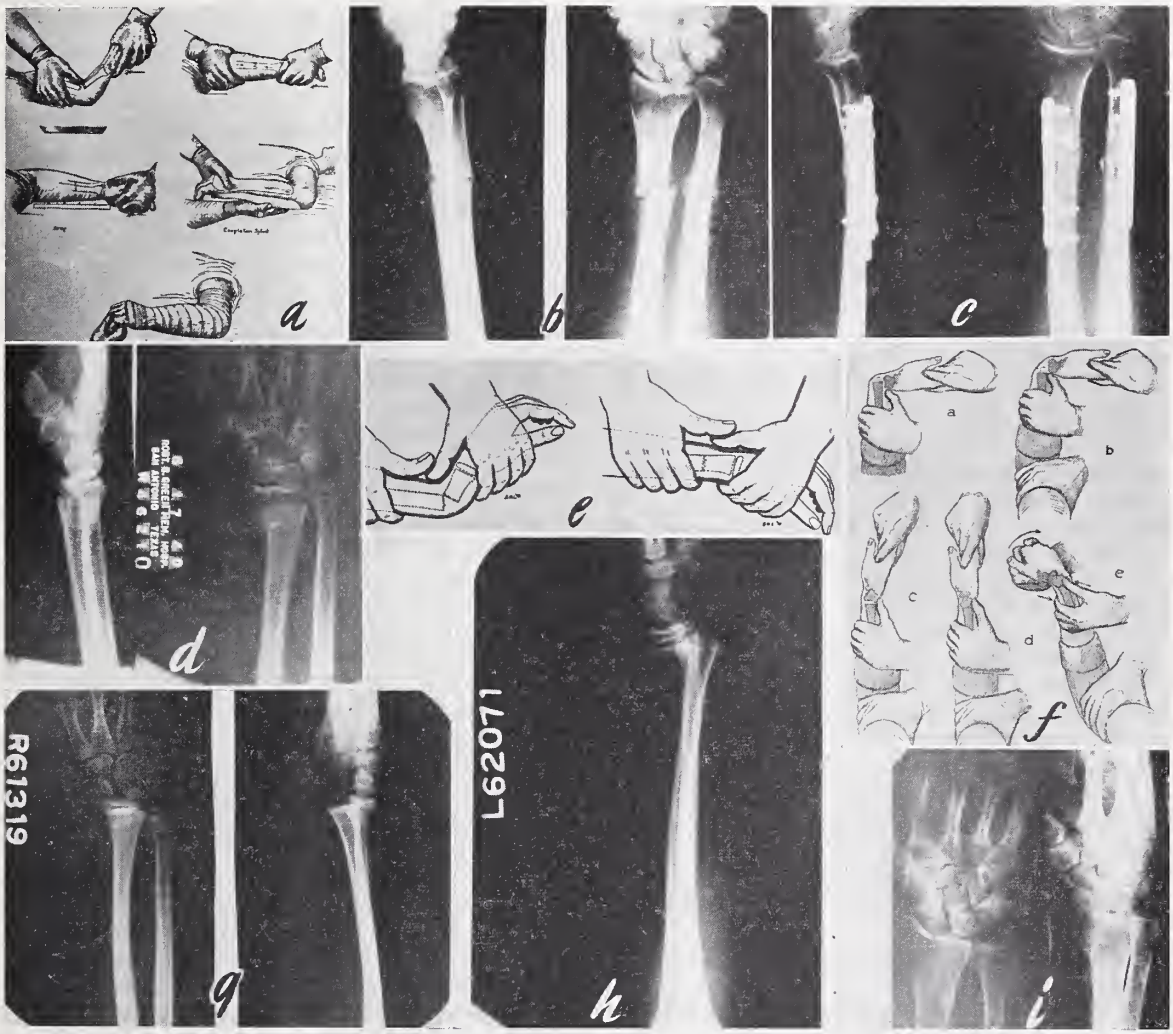

FIG. 3*a*. Method of reduction of fractures of both bones of the forearm by angulation and engagement of fragments (From Caldwell, Treatment of Fractures).

b. Delayed union of fracture of both bones of the forearm with angulation of radius toward the ulna.

c. Fractures of both bones exposed, fragments freshened and secured with vitallium plates and screws. Note reformation of normal interosseous space.

d. Typical Colles fracture of the lower end of the radius with dorsal displacement of distal fragment and angulation.

e. Method of reducing fractures of the lower end of the radius without displacement. Direct pressure and correction of the angulation restores fragments to normal position (From Levinthal[17]).

f. Method of reducing fractures of the lower end of the radius by angulation and engagement. Less traction is required by this method and results are generally better (From Caldwell, Treatment of Fractures).

g. Separation of the lower radial epiphysis with dorsal dislocation of the wrist. In this case there is no fracture and the separation takes place through the epiphyseal plate.

h. Epiphyseal separation of the lower end of the radius. This is the most common form in which the diaphysis is fractured proximal to the epiphyseal plate and the distal fragments are displaced dorsally.

i. "Chauffeur's fracture" or fracture of the styloid process of the radius. The clinical importance of this fracture lies in the fact that the articular surface of the wrist joint is involved.

the same level in the lower half of the forearm.

In children fractures of both bones may be greenstick in type with angulation but without displacement. In other cases direct longitudinal force sometimes causes impaction or "torus fractures" or "buckling fractures." In these the bones crumple about an inch above the wrist and there is a buckling on the dorsal surface. (Fig. 2*g*.)

The treatment of fractures of both bones of the forearm is very different for the various types of fractures and therefore careful x-ray examinations should be made before deciding on the course to follow. If both bones are fractured without displacement, very little manipulation is needed. Angulation can be corrected by gentle direct pressure or in some cases by wedging the completed cast at the fracture site. A cast is then applied from the axilla to the base of the fingers with the elbow flexed 90 degrees and the forearm in midposition. After six weeks the fractures are usually sufficiently healed to permit the use of a sling for another two weeks. The danger of refracture in children is great enough that if there is any doubt about the solidity of the union, another cast should be applied. (Fig. 2*h* and *i*.)

Fractures of both bones of the forearm with displacement are most difficult to treat because the paired bones interfere with the reduction of one bone or the other. And, as has been stated, nearly exact reposition should be attained before the cast is applied. If a choice is made between the fractured bones, the radius should receive the most attention since it is most vital to the function of the hand. (Fig. 2*j*.) Children possess great powers of adaptation which can overcome bowing, overlapping and inadequate reduction but this should never be relied upon to take the place of accurate reposition of fragments. The bones should be in proper alignment to preserve rotation, the ends should have normal approximation to prevent nonunion, and both bones should be equally well reduced.

To reduce fractures of both bones with displacement, strong traction is applied to the hand while counter-traction is applied to the arm immediately above the flexed elbow. As the muscles relax, the surgeon can force the fragments into normal relation by direct pressure and the interosseous space can be preserved by pressure between the radius and ulna. In fractures where there is not marked overriding, the forearm can be angulated dorsally at the site of fracture, the fragments forced by the surgeon's thumbs until they become engaged, and the forearm straightened, thus bringing the bones into normal alignment and apposition. (Fig. 3*a*.) If either of these maneuvers fails it is wiser to resort to open operation than to repeat the vigorous manipulations. Sometimes through a small incision over each fracture, the fragments can be levered into normal relation to each other and be engaged without internal fixation. In oblique or comminuted fractures the fragments may need to be fastened with wire or a vitallium plate. Plates are preferable in this instance since they preserve the normal curve in the bones and prevent angulation dorsally or toward each other. (Fig. 3*b*.)

After the fragments are reduced, a cast should be applied from the base of the fingers to the axilla with the elbow flexed 90 degrees. If the fracture is in the upper third of the forearm (above the insertion of the pronator teres muscle) the forearm should be in full supination. If the fracture is in the lower third of the forearm (below the insertion of the pronator teres muscles) the forearm should be immobilized in a mid-position between pronation and supination.

For the first few days the hand should be watched carefully for any evidence of Volkmann's contracture (pain, lowered temperature, discoloration or swelling). If any of these symptoms should appear, the anterior half of the cast should be removed immediately and if symptoms persist, the entire extremity should be suspended from the wrist.

At the end of three weeks, the cast should be removed and the position of the fragments checked by x-ray study. This is done because there is a strong tendency to dorsal angulation of the forearm even in a cast and this should be corrected by gentle manipulation at the time the cast is changed. After six weeks, union is generally solid in children. In adults, however, the period of healing may extend to eight or ten weeks. A safe general rule is that a full length cast should be worn as long as there is any tenderness over either fracture or until both bones feel perfectly solid.

Fractures of both bones of the forearm are sometimes comminuted or the line of fracture is oblique and fragments cannot be engaged. In such cases, open reduction of both bones and fixation with vitallium plates may be desirable. If there is too much comminution to permit the use of plates, it is preferable to suspend the forearm by a Kirschner wire passed through the base of the metacarpals of the hand or through the distal end of the radius and ulna. Another wire through the olecranon is attached to the weights for counter-traction. While such traction is in use the fragments are kept in normal alignment, angulation is prevented, and union generally takes place in satisfactory position. After

three or four weeks of traction, a cast is applied and subsequent care follows the plan outlined in the previous paragraph.

FRACTURES OF LOWER END OF RADIUS

Fractures of the lower end of the radius are extremely common and are unfortunately a frequent cause of permanent disability in the wrist and hand. They generally follow a fall on the outstretched hand which causes sudden hyperextension of the wrist. Abraham Colles, born in Ireland in 1773, published a short article in the *Edinburgh Medical and Surgical Journal* in 1814, "On the Fracture of the Carpal Extremity of the Radius" which forever links his name with this common fracture.

The articular surface at the lower end of the radius is normally directed distally and toward the ulnar side of the forearm. In typical Colles fractures the distal fragment is displaced dorsally and the articular surface is directed backward. The hand is deflected with the lower end of the radius to form the well-known silver-fork deformity. The distal fragment of the radius is usually from three-fourths to one inch long and in elderly patients, it is often comminuted. (Fig. 3*d*.)

The diagnosis is readily confirmed by x-ray examination in two planes and the type of treatment can be determined by the position of the fragments. In any patient who has suffered a fall on the outstretched hand followed by pain and swelling in the wrist, roentgenograms should be made to make certain that a fracture is not overlooked.

Fractures of the lower end of the radius with no displacement require only that a cast be applied from the elbow to the base of the fingers with the wrist dorsiflexed. Fractures of the lower end of the radius with even slight compression or slight dorsal tipping of the distal fragment should be reduced under anesthesia to prevent later disability of the hand or persistent pain in the distal radio-ulnar articulation. The hand is "rocked" on the intact ulna while direct pressure is made downward on the distal fragment to restore the normal relation of the radio-carpal joint. A cast is then applied from the base of the fingers to the elbow with the wrist flexed slightly. After three weeks a similar cast is applied with the wrist dorsiflexed for another period of three weeks. (Fig. 3*e*.)

Fracture of the lower end of the radius with the distal fragment displaced dorsally —the typical Colles fracture—must be exactly reduced if disability is to be prevented. I prefer a general anesthetic except in the very old or debilitated patients. A local anesthetic distends the tissues about the fracture and often fails to give the complete relaxation needed for reduction. Strong traction is made distally on the hand while counter-traction is made on the arm with the elbow flexed to a right angle. The wrist is then dorsiflexed and direct pressure is made with the thumbs over the distal fragment until it is replaced on the end of the radial shaft. Then as the wrist is flexed the pressure continues and the articular surface of the radius is tilted downward into its normal position. (Fig. 3*f*.) Fluoroscopic examination reveals whether or not the displacement is entirely corrected. If the position is satisfactory, a cast is applied from the elbow to the base of the fingers with the wrist flexed about forty-five degrees, the hand deflected to the ulnar side of the forearm, and the forearm pronated. Since palmar flexion of the wrist is a poor position for function of the hand and fingers, the cast is changed at the end of three weeks and another cast applied with the wrist dorsiflexed. This is worn for another three weeks. If at the time the cast is changed, it is impossible to dorsiflex the wrist sufficiently the new cast is applied for one week, and another manipulation attempted at the end of that time.

If the lower end of the radius is fractured without fracture of the end of the ulna, much of the longitudinal traction on the radius can be gained by "rocking" the hand on the end of the intact ulna. This is especially useful in comminuted fractures in aged patients.

If the styloid of the ulna is fractured as well as the distal end of the radius, traction must be made by direct pull on the hand. Since the radius is the more important bone at the wrist, reduction is directed more to it than to the ulna. Usually when the end of the radius is properly replaced, the ulnar styloid comes into normal position and the ulnar deviation maneuver of the hand holds the ulnar styloid against the end of the shaft while healing takes place.

In adolescent children, wrist fractures usually take the form of a separation of the lower epiphysis of the radius with dorsal displacement of the distal fragment. Reduction is easily accomplished under anesthetic by direct pressure over the fragment as traction is made on the hand. A cast is then applied from the elbow to the base of the fingers with the wrist slightly flexed. It is worn for six weeks. (Fig. 3*g* and *h*.)

An uncommon fracture of the lower end of the radius is the fracture of the posterior articular margin with dorsal dislocation of the hand—Barton's fracture. This is essentially a fracture-dislocation and the fracture fragments fall into place when the dislocation is

reduced. A cast from the elbow to the base of the fingers with the wrist dorsiflexed maintains the position of the fragments.

Another rare fracture of the lower end of the radius is the so-called reversed Colles or Smith's fracture. In this, the force is received on the hand in the flexed position and the lower fragment is displaced ventrally. Reduction requires manipulation under anesthetic and direct pressure over the distal fragment until it is forced dorsally into normal position. A cast is then applied from the elbow to the base of the fingers with the wrist dorsiflexed and it is worn for about six weeks.

Fracture of the styloid of the radius, sometimes called "chauffeur's fracture," involves the outer half of the joint surface of the wrist. (Fig. 3*i*.) They are seldom displaced but even slight displacement must be corrected to prevent later arthritic changes in the joint. This is accomplished by direct pressure over the radial styloid while the hand is manipulated into a position of ulnar deviation. A cast is then applied from the elbow to the base of the fingers to maintain this position for six weeks.

SUMMARY

Axioms of Treatment of Fractures of the Forearm

Fractures in the forearm require exact replacement to preserve elbow and wrist motion and full rotation.

The forearm can be immobilized only if the cast extends from the axilla to the base of the fingers.

In fractures of the shaft of the ulna, x-ray examination of the elbow should always be made to determine possibility of dislocation of the radial head.

No fracture of the shaft of the radius or ulna is solidly healed as long as there is tenderness over it.

"Sprained wrists" after falls on the hand often are followed by fracture of the styloid of the ulna.

After injury to the head or neck of the radius in children, the radial head should never be removed or serious growth disturbances will result.

Fractures of the shaft of the radius are markedly affected by muscle pull and to correct displacement, these forces must be clearly understood.

Injuries to the wrist in children often cause compression, or "torus" or "buckle" fractures that are easily overlooked.

In reducing fractures of both bones of the forearm it must be remembered that the ulna is the more important bone in the upper half and the radius is more important in the lower half of the forearm.

Fractures of both bones of the forearm are reduced by one of two equally effective methods—traction and direct pressure over fragments or angulation and engagement of fragments.

Fractures of the lower end of the radius which involve the articular surface of the wrist must be perfectly reduced to prevent late arthritic changes.

Fractures of the forearm are the commonest fractures in the body and are often the most difficult to treat satisfactorily.

REFERENCES

1. Anderson, R.: Fractures of Radius and Ulna; A New Anatomical Method of Treatment, J. Bone & Joint Surg. 16:379-393 (April) 1934.
2. Armstrong, G. W.; Fractures of Forearm, Canad. M. A. J. 37:358-360 (Oct.) 1937.
3. Bennett, R. J.: Fractures of Lower Forearm and Wrist, Illinois M. J. 80:17-19 (July) 1941.
4. Bisgard, J. D.: Fractures of Both Bones of Forearm; Method of Fixation, Surg. Gynec. & Obst. 65:90-91 (July) 1937.
5. Blount, W. P., Schaefer, A. A., and Johnson, J. H.: Fractures of Forearm in Children, J. A. M. A. 120:111-116 (Sept. 12) 1942.
6. Bosworth, B. M.: Fractures of both Bones of Forearm in Children, Surg. Gynec. & Obst. 72:667-669 (March) 1941.
7. Boyd, H. B.: Surgical Exposure of Ulna and Proximal Third of the Radius Through One Incision, Surg. Gynec. & Obst. 71:86-88 (July) 1940.
8. Brown, D.: The Mangled Forearm; Treatment in Skeleton Splint with Fixed Skeletal Traction, Brit. M. J. 2:425-426 (Oct. 10) 1942.
9. Carrell, W. B.: Fractures of Both Bones of the Forearm Excluding Those at the Elbow Joint and Wrist Joint, Surg. Gynec. & Obst. 66:506-511 (Feb. 15) 1938.
10. Chatterton, C. C.: Fractures of Lower End of Radius and Ulna, Minnesota Med. 26:697-699 (Aug.) 1943.
11. Cornell, N. W.: Fracture of Base of the Radius in Adults, Arch. Surg. 31:897-916 (Dec.) 1935.
12. Cunningham, S. R.: Fracture of the Ulna with Dislocation of Head of Radius, J. Bone & Joint Surg. 16:351-354 (April) 1934.
13. Gillies, C. L.: Torus Fractures of Lower Extremity of Forearm in Children, J. A. M. A. 101:1374-1376 (Oct. 28) 1933.
14. Gillies, C. L.: Traumatic Separation of Lower Epiphysis of the Radius, Am. J. Roentgenol. 37:202-209 (Feb.) 1937.
15. Haggart, G. E.: Comminuted Colles' Fractures in Elderly Patients; Methods of Treatment and End Results in 30 Cases, J. A. M. A. 105:1753-1758 (Nov. 30) 1935.
16. King, B. B.: Resection of Radial Head and Neck, J. Bone & Joint Surg. 21:839-857 (Oct.) 1939.
17. Levinthal, D. H.: Fractures in Lower One-third of Both Bones of Forearm in Children, Surg. Gynec. & Obst. 57:790-799 (Dec.) 1933.
18. Lucas-Champonierre, J.: Therapeutique des Fractures de l'extremite Inferieure du Radius, J. de Med. et Chir. Prat. 79:129, 1908.
19. Mooney, V.: Fractures of Bones of the Forearm, Am. J. Surg. 29:268-272 (Aug.) 1935.
20. Murphy, A. L.: Fractures of Forearm; Some Technical Procedures, Surg. Gynec. & Obst. 74:935-938 (May) 1942.
21. Naylor, A.: Monteggia Fractures, Brit. J. Surg. 29:323-326 (Jan.) 1942.
22. Shands, A. R., and Duncan, E. R.: Prevention and Treatment of Fracture Deformities of Lower End of Radius, Virginia M. Monthly, 64:325-330 (Sept.) 1937.
23. Smith, G. E.: The Most Ancient Splints, Brit. M. J. 1:732, 1908.
24. Speed, J. S., and Boyd, H. B.: Treatment of Fractures of Ulna with Dislocation of Head of Radius (Monteggia Fracture) J. A. M. A. 115:1699-1705 (Nov. 16) 1940.
25. Thomson, J. E. M.: Fractures of Forearm Reduced by Direct Leverage, J. Bone & Joint Surg. 18:397-401 (April) 1936.
26. Watson-Jones, R.: Fractures and Joint Injuries, Edinburgh, E. and S. Livingstone, 1943.

To whatever school of social philosophy one belongs, the fact remains that it is the private physician who sees the largest number of persons in need of medical counsel. The physician knows by training and experience that the early manifestations of pulmonary tuberculosis are protean. A good percentage of his patients have one or more of these symptoms. Many others deserve x-raying on general principles because of physiological states conducive to activation of tuberculosis.—William Courtney Douglass, M. D., Nat. Bull., May, 1945.

DIETO-METABOLIC UROLOGY

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In 1935 I had the honor to read a paper before this Society, bearing this same title. The present paper covers a continuation of that study, now embracing a twelve-year period. The first paper was published in August, 1935.[10] Much progress has been made in the interim, but the first article contains many facts that are still apropos and pertinent; therefore, reference should also be made to it.

In the first article an endeavor was made to deal with the urinary phase of this subject in a general, broad, perspective way. While the title embraces genital as well as urinary pathology, and it is realized many discoveries and much progress have been made along both lines, time will not permit covering both urological aspects; therefore, this article will deal principally with one phase of dieto-metabolic urology, namely, the urinary, and with special emphasis on the conservative medical treatment of renal colic in contradistinction to the surgical. Not that I do not recognize the frequent necessity of surgical interference in certain severe obstructions and the brilliant achievements it often produces, but as the cases are usually first in the general practitioner's hands, and as patients prefer to avoid surgery, if possible, conservative measures are generally tried first. With this thought in mind, I have adopted a method of treatment which has been relatively satisfactory in my hands, and I desire to call attention to it with the hope that it will prove as satisfactory to the patients of others as it has been to mine.

These patients usually give a history of previous attacks, and besides we all must concede that many such patients go to their graves who may never have had previous renal colic attacks or any knowledge of having urinary infections and stones, and, furthermore, most of them never undergo operation for one reason or another.

Before outlining this treatment perhaps it will be well to review briefly the cardinal points of my previous article[10] on this subject. In this, I went into more general graphic detail of abnormal urines, including hydrogen ion concentration, colloids, gels, crystals,[7] amorphous bodies, hormones, vitamins, chemical intake, hereditary, deficiency diets and conditions, faulty metabolism, foci of infections, urinary stasis, dehydration, and emphasized that patients falling in these catagories must "eat to live and not live to eat."

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The oxidation of foods within the body results in the formation of an ash. The kidneys are selective filters concerned chiefly with the elimination of the waste products of protein metabolism and minerals, and help maintain the water and acid-base bodily balance. This is a very fine delicate balance and these essential factors if not maintained over relatively long periods of time directly or indirectly may give rise to many deficiency diseases, such as stunted growth as in rickets, and lowered resistance to general systemic infections, and so forth.[1] Most of these cases are probably the end result of congenital malformations, as well as other so far unknown bodily factors, and, therefore, the patients are inherently urologically constitutionally weak.

That borderline deficiency diseases[2, 3, 5] often occur without gross morbid changes and without classical symptoms or signs of disease is well recognized, as capillary fragility in scurvy; gastro-intestinal disorders in many deficiency diseases — xerophthalmia, night-blindness, beriberi, scurvy, pellagra, et cetera; tetany shows steatorrhea and lack of calcium in diets; hyperparathyroidism, in which there is a metabolic disturbance of calcium and phosphorus, which aids in the production of urinary stones—the so-called "diabetes of calcium"; Cramer's experience[2] with magnesium imbalance, producing uremia, hemorrhagic nephritis, and so forth; keratinization of genito-urinary mucous membranes, which was first noticed in avitaminosis.[3] The close association of food, metabolism, foci, infection and lithiasis is becoming more and more realized.[12] Recently autourotherapy is advanced for certain allergic conditions in urinary infections, particularly colon bacillus pyelitis.

Aseptic urinary concretions may be formed in consequence of metabolic errors. Pure urates, cystine, and xanthine stones are known examples; also calcium oxalate, crystalline carbonate, and phosphatic calculi may at times have such an origin. Stones composed chiefly of triple phosphates and the amorphous carbonates and phosphates of calcium are formed in alkaline urine, probably the result of specific urea-splitting organisms. These are the varieties of calculi most frequent to recur and those which are seen most often in patients with stone-forming kidneys. That there is a very fine delicate and close coordination between the gastro-intestinal and renal tracts is shown in many ways, but especially by Salter[9] and his coworkers, who have demonstrated that the more acid the food the more the ammonia varies in base excretion (a) by the gastro-intestinal tract, and (b) lags in renal base conserving mechanism, and also that high protein food intake does not increase am-

monia production if sufficient alkali is taken to neutralize the acid catabolites.

Vegetables and fruits are generally alkaline in their final body reaction. Higgins[3] recommends a high acid-ash vitamin A diet as a prophylactic—6,000 to 8,000 international units. "One is as old as his arteries" is an old saying, but it is now known that this is the effect rather than the cause. Glandular secretions, hormones, enzymes, vitamins, and so forth, through the nervous system probably play more important automatic self-regulating functions than has previously been accorded to them. Kidney infections, stones, et cetera, are per se chronic pathological processes and the end result, and eternal vigilance is mandatory for both prevention and cure. Purines, cystines, histamines, xanthines, endocrines, enzymes, electrolytes, isotopics,[4] both static and dynamic, and so forth, are still little understood, but we do know much more about them than we did ten years ago, and much more is to follow.

Books have been written on kidney infections and stones,[3] but time forbids more detail here, so reference must be made to such articles. Diet including fluids, solids, and minerals play a very important part in kidney infections and stones. In my series of 100 consecutive renal colic cases only 4 patients have been known to be operated on. These were all renal colic cases of stone and infections or infections without proven stones, but all of them with severe renal colic attacks, hence potential cases of nephrolithiasis. Truly "what is food for one is poison for another." Dieto-metabolics is similar to justice—it "grinds slowly but grinds exceedingly fine." Of course surgery cannot be ruled out, but I believe it should be the court of last resort after palliative and medical treatments fail. As the title implies, this treatment involves diet and metabolism as well as physiological therapeutics, and I believe all are important. Chemical and microscopic analysis of the urine and stones are important, for the type of diet depends on this.

The following questions are still unsolved: Why are children, for the most part, free of stones? Why do stones form in one kidney and not in both (often unilateral in bilateral organs)? Why do stones vary in composition, as, for example, one person forms uric acid stones and another triple phosphate stones? Why do stones recur after removal in some and not in others? Why did over 61 per cent of Barney's cases[1] show dually hyperparathyroidism and urinary calculi, and over 70 per cent hyperparathyroidism with some bony involvement? Why do some lower animals have more of a predilection to urinary stone formation than others? Why do the world's largest renal stone areas have entirely different geological formations? Why do some patients who exhibit chronic phosphaturia, chronic cystinuria, chronic oxaluria, never form stones, and others do? What is the explanation for the varying time element in a stone's growth—rapid in some and slow in others? Why should stones subsequent to experimental studies in vitamin A deficiency be consistently of one chemical character? Why is a renal calculus per se such a slow-growing tiny thing that exists immovable for years and is not extruded? Is there not a protective mechanism in one kidney and not in the other, and if so, what is it? We could extend such queries on ad infinitum.

It is my belief that renal infections and lithiasis without complete blockage and not of definite local etiology should first be treated consistently and persistently by dieto-metabolic rather than by surgery, retrograde and local methods. A great distinction must be made between diet in health and diet in disease; "prevention is better than cure." Eternal vigilance is the price of success in renal infections and lithiasis victims, for the cause is mostly inherent hereditary and congenital bodily defects, and unfortunately few patients seem to be able to understand this and lapse in their treatments; therefore, recurrences are the rule.

Medical and Palliative Treatment

This requires much meticulous detail on the part of the doctors, nurses and patients. Nothing new or original is claimed—only systematic attention to every symptom, especially nursing and advising against the use of opiates in any form. As a general rule patients are treated more or less symptomatically. Each case will present different aspects and difficulties to be overcome. Blood counts, blood chemistry and urinalyses are all important guides. In addition to the renal problems presented, this condition is generally greatly aggravated by intestinal distension from gas and solid contents which produces pressure on the already diseased and painful, sensitive kidneys. Pressure in or out of the urinary tract from any reason aids in producing blockage, which is one of the main causes of the severe colicky pains; consequently all efforts must be directed to relieve this pressure blockage and to promote free urinary flow.

The patients have also generally been given opiates in various forms for the relief of the severe pain. In my opinion opiates are physiologically contraindicated in all attacks of renal colic, as they "add insult to injury." Except for temporary central relief of pain they are antagonistic to all the other usual presenting problems. They mask symptoms

and give a false sense of security. They increase intestinal gases, reduce intestinal and ureteral peristalysis, dry up secretions, produce constipation, and are respiratory depressants. Opiates have been the drugs most generally relied on in these attacks since time immemorial, and it took me a long time and courage to come to a realization of the fact that they really do more harm than good. In my opinion they hasten the patients to surgery, which can be avoided in the vast majority of cases. I realize the first cardinal duty of physicians is to relieve pain and suffering, but I contend that there are other and better drugs for giving relief than the opiates. Pain is only a symptom, and curbing, aborting and stopping it generally does not effect cures. The pain is caused chiefly by urinary blockage, movement of calculi and pressure. I have not given opiates for this condition in over ten years.*

Apparently many of the "ics" are involved in the treatment as chemotherapeutics, as sulfa drugs; physiotherapeutics, as heat; biotherapeutics, as penicillin, and so forth. Personally I use peristaltic stimulators first and then alternate with depressors or dilators as indicated. The best ureteral peristaltic stimulators that I have found to date, in the order named, are prostigmin 1:2000, pitressin, and several of the belladonna alkaloids; and the best peristaltic depressors or dilators are trasentin (with or without ¼ gr. phenobarbital) and syntropan. I also use mandelates, ammonium chloride, aspirin, heat, enemas, colonic irrigations, posture, and distilled water. These drugs, especially prostigmin in physiological *maximum tolerance doses*, ammonium chloride, an acid-ash diet, forcing fluids to one gallon a day, heat, posture, enemas, rectal tubes and lavages, are my chief "sheet-anchors" of treatment. I consider prostigmin in full strong doses a very useful and potent synthetic drug—the best yet, but still not strong enough. For the usual case the urine *Ph* must be kept very acid, preferably under 5. This is often very hard to do.

A list of acid and alkaline producing foods and ash is given in table 1.

As this paper is supplemental to my first one, I hope to be able to add to this subject as clinical developments present and warrant.

TABLE 1.—*Acid and Alkaline Producing Foods*

ACID PRODUCING FOODS Cubic centimeters of N/10 Alkali required to neutralize the acid ash produced by 100 Gm. of food.	
Bread, white	2.7
Bread, whole wheat	3.0
Peanuts	3.9
Egg white	5.24
Corn, sweet dried	5.95
Crackers	7.81
Rice	8.1
Meat, frog	10.36
Eggs, whole	11.10
Fish, pike	11.81
Meat, lean pork	11.87
Oatmeal	12.93
Meat, veal	13.52
Meat, lean beef	13.91
Meat, rabbit	14.80
Fish, haddock	16.07
Meat, chicken	17.01
Egg yolks	26.69
Oysters	30.00

ALKALI PRODUCING FOODS Cubic centimeters of N/10 Acid required to neutralize the alkaline ash produced by 100 Gm. of food.	
Asparagus	0.81
Milk, cow's whole	2.37
Turnips	2.68
Radishes	2.87
Apples	3.76
Cabbage	4.34
Peaches	5.04
Cauliflower	5.33
Lemons	5.45
Bananas	5.56
Oranges	5.61
Currants, dried	5.97
Peas, dried	7.07
Potatoes	7.19
Lettuce	7.37
Chestnuts	7.42
Muskmelon	7.47
Celery	7.78
Carrots	10.82
Beets	10.86
Almonds	12.38
Raisins	23.68
Beans, dried	23.87
Beans, dried lima and fresh	41.65

OTHER FOODS PRODUCING ACID ASH	
Bread (all kinds)	Ham
Cakes	Bacon
Candies	Pastries
Cereals (all kinds)	Peanut butter
Cheese	Popcorn
Corn, canned or fresh	Preserves
Cornstarch	Rhubarb
Fish (all kinds)	Squash
Gravies (flour)	Sugar
Lentils	Toast
Macaroni	(all kinds)
Meats (lean—all kinds)	Walnuts

Cranberries, prunes and plums yield an alkaline ash, yet increase the acidity of the urine by forming hippuric acid in the body.

OTHER FOODS PRODUCING ALKALINE ASH	
Apricots	Olives
Beans, string	Onions
Brussels sprouts	Parsnips
Cucumbers	Peas, green
Eggplant	Potatoes, sweet
Figs	Pumpkin
Gooseberries	Raspberries
Grapes (all kinds)	Sauerkraut
Grapefruit	Spinach
Kale	Tomatoes
Mushrooms	Pears
Okra	Pineapple

SUMMARY AND CONCLUSIONS

1. The present paper is supplemental and additional to a previous one in 1935, with the same title,[10] to which the reader is referred.

2. Emphasis is placed on the urinary rather than the genital phase, and especially to my own conservative medical symptomatic non-opiate treatment routine. "Be not the first to take up the new, nor yet the last to cast the old aside."

3. In a twelve-year series of 100 renal colic cases treated by this symptomatic medical method only 4 have been known failures and required surgery, and opiates were not given in any of them.

4. In many borderline cases we should teach the patient to "eat to live, and not live to eat"; therefore, great distinction must be made between diet in health and diet in disease for "prevention is better than cure."

5. Sheet-anchors of my treatment are listed, with emphasis on complete avoidance of opiates. If this conservative medical non-opiate treatment fails, then more radical steps must be considered, including surgery.

AUTHOR'S NOTE.—Since the present paper was presented, an article has appeared in *Texas Reports On Biology and Medicine* (Vol. 3, No. 1, Spring, 1945), by D. Slaughter, et al., entitled "The Effect of Spasmolytic Drugs on the Isolated Ureter," advocating the use of opiates as ureteral stimulators.

I should like to point out that the work on which this report is based is entirely experimental and on the isolated ureter of lower animals, whereas my report is based on a study of the entire human body, which is greatly different. Further, my report is based on clinical experience whereas the other is experimental.

6. A list of acid and alkaline producing foods is given in an accompanying table.

REFERENCES

1. Barney, J. D., and Mintz, E. R.: Some Newer Conceptions of Urinary Stone Formation, J. A. M. A. 103:741-743 (Sept. 8) 1934.
2. Cramer, W.: Experimental Production of Kidney Lesions by Diet, Lancet 2:174-175 (July 23) 1932.
3. Higgins, C. C.: The Experimental Production of Urinary Calculi, J. Urol. 29:157-170 (Feb.) 1933; Renal Lithiasis, Springfield, Illinois, Charles C. Thomas, 1943.
4. Isotopic Studies and Protein Metabolism, editorial, J. A. M. A. 123:1118 (Dec. 25) 1943.
5. Keyser, L. D.: Relation of Urinary Infections to Recurrent Calculi, J. Urol. 31:219-238 (Feb.) 1934.
6. Magnesium and Calcium Phosphate Calculi, Queries and Minor Notes, J. A. M. A. 126:670 (Nov. 4) 1944.
7. Randall, A., and Melvin, P. D.: Morphogeny of Renal Calculus, J. Urol. 37:737-745 (June) 1937.
8. Roche Review, p. 45 (Nov.) 1944.
9. Salter, W. T., and others: Studies of Calcium and Phosphorus Metabolism, J. Lab. & Clin. Med. 18:669-679 (April) 1933.
10. Stalnaker, P. R.: Dieto-Metabolic Urology, Texas State J. Med. 31:292-296 (Aug.) 1935.
11. Wilbur, D. L., and others: Nutritional Night Blindness, J. A. M. A. 102:364-366 (Feb.) 1944.
12. Young H., and Davis, D. M.: Young's Practice of Urology, Philadelphia, W. B. Saunders Company, V. 1, 1926.

VIRUS DISEASE OF THE RESPIRATORY TRACT

LT. COL. O. J. LA BARGE, M. C., A. U. S.

The term "virus" literally interpreted indicates the contagious factor or morbid principle of a disease and was not originally offered as a specific definition of the type or character of any particular group of organisms. In current medical parlance, however, this term is now applied to a group of disease producing factors possessing the inherent potentialities of living matter, probably consisting of relatively simple chemical formulae of a protein nature and of such ultramicroscopic size that the majority of types will pass through the usual varieties of bacterial filters with consummate ease. Mueller[12] believes that a typical virus is simply one or more molecules of nuclear protein containing an inherent living dividing force and essentially parasitic intracellularly because of its minute size and dependence upon preformed products of cellular metabolism for existence, reproduction, and further parasitization of individual living cells. It is his opinion that extracellular life is practically impossible for pathogenic organisms of the virus group for the above stated reasons.

It is evident that the study of such minute forms is quite beyond the capacity of the usual type of bacteriological laboratory as ultramicroscopic organisms of the virus group can be identified only by such technical procedures as tissue cultures, mouse brain cultures, and cultures on the chorioallantoic membrane of the chick embryo with final identification by neutralization tests, complement fixation tests, and immunity tests. Laboratory investigation of this type requires highly skilled technicians, an immense investment in equipment, and an infinite fund of time and patience. Oftentimes the net result of months of painstaking work consists only of frustration and bitter disappointment. Nevertheless, slow, but gradual, progress is being made in the identification and isolation of specific virus types.

Our interest in this presentation lies with the group of clinical conditions which are, for the most part, presumably of virus origin and also presumably transmitted from individual to individual by the infected secretions of the human respiratory tract. Principal among these disease entities are the symptom complexes designated clinically as red measles, German measles, the common cold, influenza, whooping cough, smallpox, primary atypical pneumonia, and the rare syndromes of psittacosis, ornithosis, lymphocytic chorio-meningitis, meningo-pneumonitis, encephalitis and possibly equine encephalomyelitis; also there is increasing evidence to the effect that this latter condition is mosquito or fly borne. We of the Army, from the standpoint of military medicine, are principally interested in four of these conditions, namely: measles (both red and German types), the common cold, influenza, and the syndrome characterized as primary atypical pneumonia. German measles is conceded to be of virus etiology and two principal types of viruses causing clinical influenza are definitely known, while the common cold, red measles, and primary atypical pneumonia are presumably of virus etiology. These four groups of clinical syndromes will be discussed in the order already noted in the preceding paragraph.

MEASLES

Both types of measles have numerous characteristics in common such as world-wide distribution, an extreme degree of contagiousness, relatively lasting immunity after an acute attack, a very low mortality rate, except in young children and the aged, and danger from serious organic damage or death resulting practically solely from complications due to secondary bacterial infections during the acute phase of the basic disease. Due to the usually very mild clinical course of German measles little attempt has been made to produce artificial immunization either of a temporary or permanent character. In red measles temporary immunity can be secured by the use of immune globulin or human placental extracts. The inducement of such temporary, complete, or partial immunity is often definitely indicated in the cases of young children or aged individuals during severe epidemics, but is not applicable to the Armed Forces because of the number involved, the temporary nature of the induced immunity, and the probability of repeated exposure to in-

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fection regardless of the area or geographical region of assignment. Since permanent immunity is induced by an acute attack in the great majority of cases, and since the distribution of measles is world-wide, it is highly desirable, from a military standpoint, that all susceptible soldiers contract red measles and recover therefrom early in their period of military service and while still in training camps in this country. Careful isolation of each individual case of red measles is advisable during the acute phase, not to protect others from exposure to measles, but to prevent others from conveying secondary bacterial invaders to the measles patient. Particular attention should be paid to ward officers, ward nurses, and ward attendants, in this regard. It is the personal opinion of this author that all susceptible soldiers should have, and recover from, red measles early in their period of military service as a part of their individual immunization programs and as preparation for combat duty in actual theaters of military operations.

THE COMMON COLD

Kruse[21] in 1914 first demonstrated that the common cold could be transmitted from human to human and to susceptible laboratory animals by the bacteriologically filterable mucoid nasal secretions of the incipient cold patient, thus demonstrating the probability that some colds, at least, are transmitted by a filterable virus. This finding has been confirmed by other workers in this field. It is generally conceded, however, that a clinical complex, indistinguishable from the virus cold, can also be induced by such organisms as Hemophilus influenzae, Micrococcus catarrhalis, Streptococcus hemolyticus, and Staphylococcus aureus. It is certain that these potentially pathogenic organisms so often found in normal throats, and, in addition, pneumococci and meningococci, may be factors in the often prevalent complications of the common cold even though the cold itself be originally of virus etiology. It has been noted repeatedly in schools, Army camps, and similar places, that epidemics of colds are frequently accompanied by, or followed by, waves of measles, diphtheria, meningitis, pneumonitis, and other respiratory tract infections. The importance of the isolation of cases of the common cold is obvious, not only to prevent the spread of the virus infection, but also to control the development of epidemics of these more serious respiratory tract complications.

In recent years the value of vaccine preparations (particularly oral antigens) has been argued pro and con by equally eminent protagonists and antagonists. A final decision is not yet apparent. The attitude of the majority of industrial physicians is typically expressed by Sessions[18], who found that oral cold vaccine appeared mainly responsible for a reduction of 85.3 per cent in work days lost in employees under his supervision. The same authority concedes, however, that the value of cold vaccines may be manifested largely by the prevention of severe complications due to secondary invading organisms since it is his opinion that pure virus colds are usually mild in character and not incapacitating from an industrial standpoint unless secondary complications appear. McGee[10] and his colleagues, on the other hand, feel that such vaccines are of no practical value. Further investigation of this entire problem is indicated.

From the military standpoint the common cold is of interest because of its rapid spread among troops, the time lost from duty as a result, and because an epidemic of the common cold is often followed by a wave of other acute contagious diseases, or serious complications in the individual soldier as the result of intercurrent infection. No adequate measures of cold control for troops in the field or in barracks have, as yet, been devised, although it does appear that seasoned troops gradually acquire some degree of immunity to this type of mass infection.

INFLUENZA

Severe colds and moderately severe influenzal states merge so insensibly into each other from the standpoint of symptomatology that even the most astute clinician cannot see where one condition ends and the other begins. Influenza has been described with and without rhinitis, and with or without sore throat or other evidences of localized upper respiratory involvement. Suffice it to say that when most of us are confronted by a patient complaining of chilly sensations, fever, headache, backache, weakness, and general malaise, we are likely to include influenza in our differential diagnosis, and this is especially true if such a symptom complex is accompanied by a normal white blood count or an actual leukopenia.

There is general agreement to the effect that clinical influenza is a virus disease. In 1933 Smith, Andrewes and Laidlaw[20], in England, isolated the influenza A virus from clinical cases of epidemic influenza, while Magill[8] and Francis[4], working independently of each other, isolated the influenza B virus from cases in this country in 1940. While influenza A virus and influenza B virus do not cross immunize against each other and are probably immunologically distinct agents, cases cannot be differentiated on clinical grounds. That there is yet another, and possibly many more virus types involved in the

influenza problem, is predicated by Horsfall[7], who found in a study of five separate influenza epidemics (1276 cases) in 1940 and 1941 that an average of 30 per cent of the cases encountered could not be ascribed to either of the viruses of influenza A or influenza B. For the sake of convenience these other probable virus agents have been grouped under the convenient term of influenza Y[7]. In addition, it is evident that various virus strains with minor antigenic differences may exist within the virus groups conveniently labeled as influenza A and influenza B[7]. To add to the complexity of the problem, Horsfall[7] is definitely of the opinion that the great pandemics of influenza, such as the one of 1918, are not caused by any of the now known virus groups and that the etiological factor, or factors, in such pandemics is still a mystery.

While the morbidity rate of influenza is high there is general agreement that the mortality rate is low in conventional uncomplicated influenza and that death, if it does occur, is usually due to a complicating intercurrent or secondary pulmonary infection. Scadding,[17] however, has described a bronchiolitis and acute interstitial pneumonia in fatal cases of influenza in which no secondary bacterial invaders could be demonstrated. Nevertheless, complicating pulmonary consolidations due to hemophilus influenzae, streptococci, staphylococci, and/or pneumococci, probably account for the major portions of the observed mortality and this has been particularly true in the cases of pregnant women, debilitated individuals, and the aged groups.

None of the known virus agents of influenza have been isolated from the blood during an acute attack of the disease, and it is generally conceded[7] that the infecting agent can multiply only in the cellular lining of the respiratory tract. This peculiarity may account for the fact that while the antibody titer, particularly for influenza A, is high immediately following an attack, the immunity is gradually lost and in from six to twelve months usually reaches preinfection levels. Thus, repeated attacks of influenza can and do occur in the same individual[19] without any evidence of acquired immunity from repeated attacks. This peculiarity of the disease raises strong doubts that any worthwhile degree of active immunity can be secured by the present methods of artificial immunization. Henle, Henle and Stokes[5], however, have reported favorable results from the use of a formaldehyde-inactivated allantoic fluid vaccine elaborated from three strains of influenza A virus, while other investigators have also reported partially favorable results. Bodily and Eaton[1] found in most instances that the antibody response to single strains of virus A vaccine was not broad enough to give protection against other virus A strains. Furthermore, some individuals showed no antibody response whatsoever, while a few developed antibody response to both influenza A and influenza B strains after vaccination with a single strain of influenza A vaccine. It is obvious that immunization procedures against influenza are still in a highly experimental phase and that much remains to be done before such measures become of practical value and available for application upon a scale suitable for the requirements of an organization such as our present Armed Forces.

There is no specific treatment for influenza. The development of a major epidemic would, in all probability, give many opportunities for the treatment of bacterial pulmonary complications with the sulfonamides and penicillin. There is no particular reason to believe that such treatment would be ineffective and in that respect the prospects for the future are, at least, somewhat better than they have been in the past.

From the military standpoint, influenza is of distinct interest not because we have had any large or particularly serious epidemics in World War II up to the present date, but rather because the stage is set for a worldwide pandemic of equal or greater magnitude than that of 1918-1919 when approximately twenty million persons died throughout the entire world. Such a pandemic might well immobilize Armies, decimate civilian populations, change the entire course of military events, and influence the future history of the world for unpredictable decades of time. Against such a pandemic we have no proven prophylactic agent nor have we any sure citadel of therapy.

PRIMARY ATYPICAL PNEUMONIA

Since 1938 attention has been centered upon a clinical pulmonary complex, presumably of virus etiology, which has been reported in epidemic form from hospitals, schools, Army camps, and the public at large. This symptom complex has been classified and designated by various authors[3] as influenzal pneumonia, acute pneumonitis, pneumonitis, acute interstitial pneumonitis, atypical pneumonia with leukopenia, bronchopneumonia of unusual character and undetermined etiology, bronchopneumonia of unknown etiology, pulmonary virus disease, and atypical bronchopneumonia of undetermined etiology. For purposes of classification, The Surgeon General of the Army[14] has suggested the designation of "primary atypical pneumonia, etiology unknown" as being reasonably descriptive of the clinical syndrome involved. Dingle and Finland[3] postulate that this symptom complex

is probably produced by a "number of known bacteria and viruses" although there is no actual proof that this postulation is, in fact, entirely true. In this regard Reiman, Havens, and Price[16] have emphasized that in 4 out of 8 cases suspected clinically of having primary atypical pneumonia, complement fixation tests gave indirect evidence of infection with the virus of psittacosis or the related viruses of ornithosis, meningo-pneumonitis, lymphogranuloma venereum, and/or lymphocytic choriomeningitis. These authors conclude that "any one of these viruses may be the cause of a form of virus pneumonia."

The incubation period of primary atypical pneumonia is unknown, but the onset is usually characterized by an influenzal-like picture of headache, generalized malaise, chilly sensations and fever[22] after one or two premonitory days of a slightly below par feeling. A severe, frank chill is unusual. A moderate degree of sore throat or slight rhinitis may be present and almost always there is some sensation of sub-sternal soreness with an irritating, relatively non-productive cough[3]. In some instances, however, there may be no cough of any consequence. Early in the disease the scanty sputum is more mucoid than purulent and may even be streaked with bright red blood. Later on the sputum has a tendency to develop a greyish, semi-purulent character. Depending upon the severity of the case, the temperature range may be anywhere from 101F to 105F. In some patients the degree of prostration may be extreme, but for the most part the early appearance of the patient is surprisingly good and not at all indicative of the presence of a clinical pneumonitis. As the disease progresses a slight or moderate cyanosis may be in evidence, but in general, a marked cyanosis occurs only in the later phases of the unusually severe cases. At the onset the pulse rate is usually normal or only slightly elevated, but with the passage of time the pulse rate appears to become proportionate to the degree of fever and the general evidences of toxicity in the individual case. It is unusual to find disorientation or marked mental symptoms[3].

Early in the disease physical examination is definitely disappointing[3]. The pharynx may be injected and the face flushed, but the patient does not appear as ill as the temperature would indicate. The respiratory rate is usually normal and the patient does not appear to be in any particular respiratory distress. In the early phases, pulmonary findings are usually conspicuous by their absence and if present at all are limited to a few fine crepitant late inspiratory rales over the area of involvement[3]. Even as the disease progresses, pulmonary signs are not marked and the frank picture of marked pulmonary consolidation which is so evident in a lobar pneumonia is practically never seen. Marked dyspnea appears only in the severe cases. Occasionally late in the course of the disease as the patient becomes convalescent, coarse, more fluid inspiratory rales may appear, but it should be emphasized that a typical clinical case of moderate severity may run its entire course without even an astute clinician being absolutely sure from the standpoint of physical examination alone, as to which side of the chest is pathologically involved. In young adults, complications are unusual, and relatively prompt recovery is the rule, but many patients complain of weakness, prostration and inability to work long after all external signs of illness have entirely disappeared.

The laboratory data are also disappointing. The white blood count is normal, below normal, or only moderately increased, with little disturbance of the normal leukocyte-lymphocyte ratio. The sedimentation rate is usually moderately increased. Blood cultures are uniformly negative and positive urinary findings are unusual. Sputum examinations reveal, as a rule, a marked growth of Micrococcus catarrhalis, hemolytic streptococci and pneumococci of the higher groups[13]. Peterson, Ham, and Finland[15] have reported the presence of cold agglutinins in a large percentage of their cases. This finding has been confirmed by Hobbs[6], but he has found also that such agglutinins are commonly present in the serum of patients with diseases other than primary atypical pneumonia, so this finding cannot be considered as diagnostic in any sense.

The first definite intimation of pulmonary involvement is usually supplied by roentgenologic examination of the chest[3] and pulmonary involvement may be extensive with minimal or even absent physical signs[13]. A slight suppression of breath sounds at one base or the other may be the only findings suggestive of intra-pulmonary pathology. However, it must be emphasized that initial roentgenological examination may be entirely negative and positive roentgen changes may not occur until the second or even the third day of the disease[13]. Serial films will thereafter demonstrate the gradual progression of pulmonary involvement from a local streaked exaggeration of the peribronchial markings[13] to a diffuse outwardly spreading infiltration from the hilum towards the periphery of the affected lung[3]. It is seldom that an entire lobe is involved, but in severe cases a diffuse mottling of an entire lung resembling miliary tuberculosis may be in evidence[13]. While the lesions are usually basilar in location, there is no definite predilection for either lung and

bilateral involvement has been noted in about 20 per cent of the reported cases[3]. Lesions of an upper lobe may be exceedingly difficult to differentiate from a primary tuberculous complex[13] without several weeks of clinical observation. Campbell and his associates[2] have emphasized the frequent finding of areas of atelectatic lung as manifested by elevation of the diaphragm, mediastinal shift, and the appearance and disappearance of mottled areas of pulmonary density over night. Our own clinical experience has been repeatedly in conformity with these observations. Although the radiographic picture is fairly distinctive, it may, as Dingle and Finland[3] have emphasized, "show sufficient variations to be confused with that of pneumococcal pneumonia, bronchopneumonia, acute bronchitis, tuberculosis, pulmonary abscess, acute bronchiectasis, metastatic infiltration, and, of course, the known virus and rickettsial diseases that involve the lung." Resolution is slow and evidence of hilar thickening may persist for weeks and even be evident long after the patient is clinically well.

In a disease of relatively low mortality, knowledge of the pathology, both gross and microscopic, is necessarily limited. Campbell and his colleagues[2] report an interstitial pneumonitis with bronchitis, bronchiolitis, peribronchitis, and peribronchiolitis. Associated areas of atelectasis caused by mechanical obstruction of the bronchi and bronchioles are also much in evidence, but the underlying pathological process cannot, in their opinion, be classified as a true pneumonia. There are no frank hemorrhagic phenomena. In some cases the major bronchi show patchy epithelial sloughing with an edematous mucosa diffusely infiltrated with lymphocytes, an occasional plasma cell, and a moderate number of neutrophiles. Peribronchial collections of lymphocytes are conspicuous about the smaller bronchi. The alveolar walls are edematous and packed with mononuclear cells containing evidence of phagocytic properties. The perihilar glands are definitely enlarged and the contents of the bronchial tree are grossly of a purulent character. Needles and Gilbert[13] report pathological changes of a similar character and call attention to the striking similarity between the pathology of this disease and that of true influenzal pneumonia. McNaught[11] in an exhaustive review concluded that the pulmonary pathology of so-called primary atypical pneumonia is essentially similar to that of virus and rickettsial diseases of the lung in general, and can be exactly duplicated by such proven virus and rickettsial diseases as psittacosis, meningo-pneumonitis, and Australian Q fever.

As a symptom complex which is becoming definitely more common, which has a relatively high morbidity, and which results in prolonged periods of disability and hospitalization, primary atypical pneumonia is now of paramount interest to the Armed Forces. Unfortunately, as yet, there is no known prophylactic agent of value, nor any established program of immunization. It is obvious that such a program must await identification of the causative agent or agents which are presumably of the virus type. Treatment of the symptom complex is at present purely symptomatic. Oxygen is of definite value in the cyanotic cases and small repeated blood transfusions may aid the patient. In our experience, codiene sulfate in small doses has been most effective in controlling the cough, headache, and general discomfort. Morphine and the barbital derivatives appear to be definitely contraindicated as the secondary respiratory depression resulting from the use of these drugs appears to be conducive to the spread of the original area of infiltration. Adequate fluid intake and good nursing procedures are of paramount importance. The strict isolation of each case is essential, and attending physicians, nurses, and ward attendants should be particularly cognizant of the danger of transmission of the disease through the medium of droplet dispersion and dissemination, as well as from direct contact with the infected secretions of the upper respiratory tract. The sulfonamides are of no proven value except possibly in prolonged cases in which secondary bacterial infections can be presumed to have occurred. Marked weight losses occur in severe cases and these debilitated, markedly weakened patients require long periods of carefully supervised convalescence. In the convalescent phase therapeutic exercise should be carefully controlled and the tendency to return these patients to a duty status at too early a date must be constantly combated. Recurrences can be avoided by conservative management and the attending medical officer must be immune to the pleas of well meaning, but nevertheless, professionally uninformed individuals in this regard.

ABSTRACT OF DISCUSSION

Col. Alexander Marble, M. C.: It has been our experience in the military service that at times primary atypical pneumonia may be relatively asymptomatic. Occasionally chest roentgenograms made in the course of a routine examination for a special school or other reason, will show findings characteristic of atypical pneumonia. Close questioning fails to elicit from the soldier any history suggesting an acute illness. If these men are placed in the hospital, usually much to their disgust, it is found that the abnormal shadows in the lung fields gradually disappear. In such patients, by the time they come under close observation, no fever, no leukocytosis, and no increase in the sedimentation rate are demonstrable.

REFERENCES

1. Bodily, H. L., and Eaton, M. D.: Specificity of the Antibody Response of Human Beings to Strains of Influenza Virus, J. Immunol. 45:193-204 (Nov.) 1942.
2. Campbell, T. A., Strong, P. S., Grier, G. S., III, and Lutz, R. J.: Primary Atypical Pneumonia; A Report of 200 Cases at Fort Eustis, Virginia, J. A. M. A. 122:723-729 (July 10) 1943.
3. Dingle, J. H., and Finland, M.: Virus Pneumonias of Unknown Etiology, New England J. Med. 227:378-385 (Sept. 3) 1942.
4. Francis, T., Jr.: A New Type of Virus from Epidemic Influenza, Science 92:405-408 (Nov. 1) 1940.
5. Henle, W., Henle, G., and Stokes, J., Jr.: Demonstration of the Efficacy of Vaccination Against Influenza Type A by Experimental Infection of Human Beings, J. Immunol. 46:163-175 (March) 1943.
6. Hobbs, R. E.: Cold Agglutinins, A Preliminary Study, to be published.
7. Horsfall, F. L., Jr.: The Present Status of the Influenza Problem, J. A. M. A. 120:284-287 (Sept. 26) 1942.
8. Magill, T. P.: A Virus from Cases of Influenza-like Upper Respiratory Infection, Proc. Soc. Exper. Biol. & Med. 45:162-164 (June) 1943.
9. Magill, T. P., and Sugg, J. Y.: Antigenically Different Strains of Virus from Localized Influenza Outbreak, Proc. Soc. Exper. Biol. & Med. 53:104-106 (June) 1943.
10. McGee, L. C., Andes, J. E., Plume, C. A., and Hinton, S. H.: "Cold Vaccines" and the Incidence of the Common Cold, J. A. M. A. 124:955-957 (Feb. 26) 1944.
11. McNaught, J. B.: Virus Pneumonia, Review of the Pathology, California & West. Med. 59:220-224 (Oct.) 1943.
12. Mueller, J. H.: Virus and Rickettsial Diseases, Cambridge, Massachusetts, Harvard University Press, 1940.
13. Needles, R. J., and Gilbert, P. D.: Primary Atypical Pneumonia; Report of 125 Cases with Autopsy Observations in One Fatal Case, Arch. Int. Med. 73:113-122 (Feb.) 1944.
14. Official Statements: A Manual prepared by the Council on Physical Therapy of the American Medical Association and the Subcommittee on Physical Therapy and the Committee on Information, National Research Council: Primary Atypical Pneumonia, Etiology Unknown, War Med. 2:330-333 (March) 1942.
15. Peterson, O. L., Ham, T. H., and Finland, M.: Cold Agglutinins (Autohemagglutinins) in Primary Atypical Pneumonias, Science 97:167 (Feb. 12) 1943.
16. Reimann, H. A., Havens, W. P., and Price, A. H.: Etiology of Atypical ("Virus") Pneumonias with a Brief Resume of Recent Discoveries, Arch. Int. Med. 70:513-522 (Oct.) 1942.
17. Scadding, J. G.: Lung Changes in Influenza, Quart. J. Med. 6:425-465 (Oct.) 1937.
18. Sessions, J. C.: Respiratory Infections; Prophylaxis with Oral Water-soluble Antigenic Substances, Indust. Med. 11:373-375 (Aug.) 1942.
19. Siegel, M., and others: A Study in Active Immunization Against Epidemic Influenza and Pneumococcus Pneumonia at Letchworth Village; Results in an Epidemic of Influenza A in 1940-1941, Am. J. Hyg. 35:186-230 (March) 1942.
20. Smith, W., Andrewes, C. H., and Laidlaw, P. P.: A Virus Obtained from Influenza Patients, Lancet 2:66-68 (July 8) 1933.
21. Stitt, E. R., Clough, P. W., and Clough, M. C.: Practical Bacteriology, Haematology and Animal Parasitology, Philadelphia, Pennsylvania, P. Blakiston's Son Company, 1938.
22. Suttenfield, F. D.: Primary Atypical Pneumonia (Virus Pneumonia), Mil. Surgeon 93:360-364 (Oct.) 1943.

HEART REST AT SEA LEVEL

If you want to give your heart a rest, get down to sea level.

"Descent to sea level from a high altitude does afford some rest for the heart," the June 16 issue of *The Journal of the American Medical Association* explains in its Queries and Minor Notes department.

It is calculated that at 15,000 feet the heart works about 20 per cent harder to accomplish 20 per cent less work than at sea level. The pressure of the air at higher altitudes is much less than it is at sea level, and therefore the pressure of the oxygen which is breathed in is also decreased. For this reason, the heart has to work harder to supply the necessary oxygen to the tissues. Even climbing in a plane from sea level to 8,500 feet increases the work of the heart. However, *The Journal* says, "few instances of serious consequence, even in those who have heart disease, have ever been reported as a result of airplane flights."

Prolonged malnutrition is a much more serious medical problem than famine because it leads to diseases of low resistance, the chief of which is tuberculosis, and to conditions which may take several generations to remedy.—Lord Horder, J. A. M. A., May 6, 1944.

THE USE OF ALUMINUM-PENICILLIN MIXTURES IN MAINTAINANCE OF BLOOD LEVELS OF PENICILLIN

I. INTRAMUSCULAR INJECTIONS OF ALUMINUM-PENICILLIN

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One of the most interesting problems arising from the therapeutic use of penicillin is a study of the methods of prolonging the action of penicillin in the body. The rapid elimination of penicillin by excretion in the urine makes it difficult to maintain therapeutic levels except when the drug is given either by constant intravenous drip or by frequent intramuscular injections. When one realizes the economic waste attendant with overdosage and the inconvenience of hospitalization for intravenous or three hour intervals intramuscular injections, the importance of some method of delaying absorption and consequent maintainance of therapeutic blood levels for longer periods is self-evident.

Efforts to prolong the therapeutic action of penicillin have taken two forms: (1) diminishing the rate of absorption, and (2) retarding excretion from the body. Varying degree of retardation of absorption of intramuscular injections have been accomplished by several methods. The more successful of these methods has been the use of penicillin-oil emulsions by Raiziss[5], penicillin-beeswax-oil mixtures by Romansky and Rittman[7] and the use of penicillin-gelatin mixtures in conjunction with vasoconstrictor by Parkins, *et al.*[4] Trumper and Hunter[9] produced delaying action by vasoconstriction by simply applying an ice bag over the area of injection.

Zinnamon and Seeberg[10] reported further on the clinical use of fixed oils and beeswax on delaying intramuscular absorption. They mention trying aluminum hydroxide, pectin and globulin, as well as the fixed oils, with some success.

Upon the publication of the work of Romansky and Rittman in October, 1944, we thought it of interest to study the effect of aluminum-potassium sulfate and penicillin mixtures in delaying intramuscular absorption, since this aluminum material was so successful in delaying absorption of diphtheria toxoid.

IN VITRO STUDIES

The effect of aluminum on the bactericidal action of penicillin for Staphylococcus aureus was determined by mixtures of two types of aluminum compounds, aluminum cream (A.

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TABLE 1.—*Effect of Aluminum on Bactericidal Action of Penicillin at 5-10 C.*

Mixtures	Diluted to	Time of Test 30 minutes	2 day	3 day	7 day	21 day	90 day	180 day
Pencillin in 1% phosphate buffer	0.5 unit	19 mm.	19 mm.	19 mm.	19 mm.	19 mm.	21 mm.	26 mm.
	1.0 unit	23 mm.	23 mm.	24 mm.	23 mm.	23 mm.	22 mm.	30 mm.
Penicillin in 2% aluminum potassium sulfate (20 mg. per ml.)	0.5 unit	19 mm.	19 mm.	18.5 mm.	19 mm.	18.5 mm.	19 mm.	———
	1.0 unit	24 mm.	23 mm.	23 mm.	23 mm.	20 mm.	24 mm.	———
Penicillin in 50% conc. of 10% aluminum cream (A.O.A.C.)	0.5 unit	14 mm.	15 mm.	14 mm.	14 mm.	14 mm.	20 mm.	24 mm.
	1.0 unit	18 mm.	18 mm.	19 mm.	19 mm.	18 mm.	22 mm.	24 mm.
Penicillin in 1% conc. of 10% aluminum cream (A.O.A.C.)	0.5 unit	18.5 mm.	18 mm.	18 mm.	18 mm.	18 mm.	18 mm.	22 mm.
	1.0 unit	23 mm.	24 mm.	23 mm.	22.5 mm.	23 mm.	18 mm.	30 mm.
Penicillin Standard Merck	0.5 unit	19 mm.		19 mm.	19 mm.	18 mm.	18 mm.	23 mm.
	1.0 unit	23 mm.		23 mm.	23 mm.	24 mm.	22 mm.	26 mm.

O. A. C.)[2] and aluminum potassium sulfate in 1 per cent phosphate buffer solution,[8] with dried sodium and calcium salts of penicillin*, storing the mixtures at ice box and room temperatures and assaying at varying periods of time.

Dilutions of penicillin were made to contain 100,000 units, 10,000 units and 1,000 units penicillin per ml. and the amount of aluminum in the case of aluminum potassium sulfate, was held at 20 mg. per ml. regardless of the unitage of penicillin.[3] The cylinder plate assay method of Schmidt and Moyer[8] was used and the standard control penicillin was obtained from the Research Laboratories of the Merck Company. Staphylococcus aureus No. 209-P was the test organism. The mixtures of both the sodium and calcium salts of penicillin and the aluminum stored at ice box temperatures (5 to 10° C.) showed no deterioration or diminution of bactericidal activity for Staphylococcus aureus up to 90 days storage. The mixtures stored at room temperature (20 to 32 C.) showed no decrease in bactericidal activity for 14 days, with gradual diminution following that period.

The penicillin-aluminum cream mixtures maintained undiminished bactericidal action up through 180 days. These mixtures, however, were not studied further as it was felt that their use would involve too heavy a concentration of aluminum and result in undesirable local reactions to the aluminum itself upon intramuscular injection.

The results of these experiments are summarized in tables 1 and 2.

IN VIVO STUDIES

Local and systemic (temperature) reactions of aluminum potassium sulfate-penicillin mixtures containing 16,000 units of penicillin and 20 mg. aluminum were studied in normal rabbits. Both subcutaneous and intramuscular routes of injection were studied. Control animals were injected with penicillin in 1 per cent phosphate buffer and penicillin-beeswax-peanut oil mixtures of Romansky and Rittman. Local reactions were observed for 14 days; temperature curves were recorded up to 50 hours; and blood concentration assays were made at 2, 6, 8, 12 and 24 hours after injection. The tube assay method of Randall, Price and Welch[6] using B. subtilis was employed for these assays as well as the Schmidt and Moyer cylinder plate method.

No significant local reactions were observed, although in some animals a small nodule could be felt at the site of subcutaneous injection for several days. There was some

*Winthrop Chemical Company.

TABLE 2.—*The Effect of Aluminum on the Bactericidal Action of Penicillin Sodium and Calcium, Dried at Icebox and Room Temperature.*

Mixture	Temperature	Diluted to	Time of Test 1 hour	6 hour	3 day	7 day	14 day	60 day
Penicillin sodium in 2% potassium aluminum sulfate (20 mg. per ml.)	Room 20-32° C.	0.5 unit	12 mm.	12 mm.	14 mm.	16 mm.	16 mm.	12 mm.
		1.0 unit	18 mm.	20 mm.	22 mm.	20 mm.	22 mm.	24 mm.
	Icebox 5-10° C.	0.5 unit	14 mm.	12 mm.	16 mm.	14 mm.	16 mm.	8 mm.
		1.0 unit	22 mm.	24 mm.	22 mm.	24 mm.	22 mm.	24 mm.
Penicillin calcium in 2% aluminum potassium sulfate (20 mg. per ml.)	Room 20-32° C.	0.5 unit	12 mm.	13 mm.	12 mm.	14 mm.	14 mm.	8 mm.
		1.0 unit	22 mm.	24 mm.	18 mm.	22 mm.	20 mm.	16 mm.
	Icebox 5-10° C.	0.5 unit	11 mm.	12 mm.	16 mm.	14 mm.	11 mm.	11 mm.
		1.0 unit	24 mm.	26 mm.	24 mm.	24 mm.	22 mm.	26 mm.
Control penicillin 1% phosphate buffer		0.5 unit	12 mm.	12 mm.	12 mm.	11 mm.	12 mm.	16 mm.
		1.0 unit	24 mm.	24 mm.	26 mm.	26 mm.	24 mm.	28 mm.

redness and swelling of the subcutaneous injection sites in 1 to 3 days, but no observable reactions occurred with intramuscular injections.

There was no significant rise in temperature in the animals receiving one injection or three injections at daily intervals of the aluminum-penicillin mixture administered by intramuscular or subcutaneous routes.

Blood concentrations of penicillin of the animals receiving the aluminum-penicillin mixtures compared favorably with those receiving penicillin-beeswax-peanut oil mixture, remaining at assayable level for 8 hours. The results of the blood concentrations are presented in table 3.

TABLE 3.—*Penicillin Serum Concentrations of Injected Animals.*

Animal No.	Vehicle and Dosage	Blood serum concentrations in units per ml. 2 hr.	6 hr.	8 hr.	12 hr.	24 hr.
1	Alum.-pen. Na salt 16,000 u. IM*	.5	.25	.15	0	0
2	Alum.-pen. Na salt 16,000 u. SC	.25	.15	0	0	0
3	Plain-pen. Na salt 16,000 u. IV	.5	0	0	0	0
4	Plain-pen. Na salt 16,000 u. IM	.25	0	0	0	0
5	Alum.-pen. Ca salt 16,000 u. IM	.5	.25	.15	0	0
6	Alum.-pen. Ca salt 16,000 u. SC	.25	.15	0	0	0
7	Plain-pen. Ca salt 16,000 u. IV	.25	0	0	0	0
8	Plain-pen. Ca salt 16,000 u. IM	.5	0	0	0	0
9	Pen.-beeswax-oil Na salt 16,000 u. IM	.25	.15	.15	0	0
10	Alum.-pen. Na salt 10,000 u. at 24 hr. intervals IM 1st	.25	.15	0	0	0
	2nd	.25	.15	.15	0	0
	3rd	.25	.15	.15	0	0
11	Plain-pen. Na salt 10,000 u. at 24 hr. intervals IM 1st	.5	0	0	0	0
	2nd	.25	0	0	0	0
	3rd	.25	0	0	0	0
12	Alum.-pen. Na salt 30,000 u. (3 ml.) IM	.5	.15	.15	0	0

*IM is intramuscular. SC is subcutaneous. IV is intravenous.

The success of the use of aluminum for delaying intramuscular absorpton and the consequent maintainance of longer periods of therapeutic penicillin levels in the blood, and the absence of local and temperature reactions in the animal experiments seemed to warrant a clinical trial of this aluminum-penicillin mixture.

Arrangements were made to try injections of aluminum-penicillin in patients in Venereal Disease Rapid Treatment Centers in the state. Various doses of aluminum-penicillin and plain penicillin in buffer solution were given. The temperatures were charted for 8 hours and the blood level assays were made at intervals up to 24 hours after injection. Urine samples were assayed on some of the patients. No significant local or temperature reactions were observed following the intramuscular injections which were given into the gluteal muscle.

The first objective was to determine the smallest dose of aluminum-penicillin given in a single injection which would maintain an assayable level in the blood for 6 to 9 hours. It was found that single injections of 50,000 units of aluminum-penicillin would maintain assayable levels in the blood for 6 hours, and doses above 75,000 units would maintain levels for 9 hours. The next step was to study blood levels following 2 injections of aluminum penicillin at 9 hour intervals. With this procedure it was found possible to maintain a level of 0.125 units penicillin per ml. blood serum for a total of 19 hours with dosage of 50,000 units penicillin.

With these first trials of the aluminum-

TABLE 4.

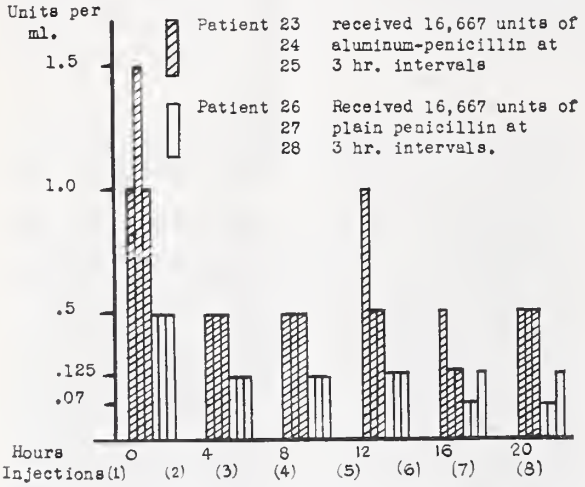
Patient	Dosage	Vehicle	Penicillin serum concentrations units per ml. 3 hrs.	6 hrs.	9 hrs.	12 hrs.	18 hrs.	24 hrs.	Diagnosis	Result
1	320,000	Alum-pen.		.5	.25	.07	0	0	Sec. syphilis	
6	320,000	Plain-pen.		.125	0	0	0	0	Sec. syphilis	Cure*
17	300,000	Alum-pen.	1.0	.5	.03	.03			Gonorrhea	Cure
2	160,000	Alum-pen.		.25	.125	0	0	0	Gonorrhea	Cure
7	160,000	Plain-pen.		.07	0	0	0	0	Gonorrhea	Cure
18	150,000	Alum-pen.	1.0	.125	.03	0	0	0	Gonorrhea	Cure
19	100,000	Alum-pen.	.25	.125	.03	0			Gonorrhea	Cure
3	80,000	Alum-pen.		.25	.07	0	0	0	Syphilis & Gonorrhea	
8	80,000	Plain-pen.		.07		0	0	0	Gonorrhea	Failure
20	75,000	Alum-pen.	.25	.125	0	0			Gonorrhea	Cure
21	50,000	Alum-pen.	.25	.125	0	0			Gonorrhea	Cure
4	40,000	Alum-pen.		.07	0	0	0	0	Syphilis	
9	40,000	Plain-pen.		0	0	0	0	0	Syphilis	
22	25,000	Alum-pen.	.125	0	0	0			Gonorrhea	Cure
5	20,000	Alum-pen.		0	0	0	0	0	Syphilis	
10	20,000	Plain-pen.		0	0	0	0	0	Gonorrhea	Cure
2 injections 9 hrs. apart			9 hrs.	3 hrs.	6 hrs.	9 hrs.	24 hrs.			
11	200,000	Alum-pen.	.125	1.0	.125	.125	.06		Gonorrhea	Cure
12	150,000	Alum-pen.	.125	.25	.125	.25	0		Gonorrhea	Cure
13	100,000	Alum-pen.	.125	.25	.125	.03	0		Gonorrhea	Cure
14	75,000	Alum-pen.	.125	.25	.125	.03	0		Gonorrhea	Cure
15	50,000	Alum-pen.	.25	.125	.125	.125	0		Gonorrhea	Cure
16	25,000	Alum-pen.	0	.125	.03	0	0		Gonorrhea	Cure

*Cure means negative culture within 24 to 48 hours on the gonorrhea patients.

penicillin mixtures no attempt was made at selection of patients with the result that some were syphilis cases and some were cases of gonorrhea.

The results with the first 22 patients are presented in table 4.

A second series of patients were used to study the effect of repeated daily injections of the aluminum-penicillin doses with the thought in mind of its use in the treatment of syphilis.[1] Blood level assays were run and reactions noted in 12 patients, 6 of whom received aluminum-penicillin and 6 received plain penicillin, 16,667 units each three hour interval. Blood assays were made at 1, 2 and 3 hour intervals after injection. It was found that the use of aluminum-penicillin


Units per ml.
1.5
1.0
.5
.125
.07
Patient 23 24 25 received 16,667 units of aluminum-penicillin at 3 hr. intervals
Patient 26 27 28 Received 16,667 units of plain penicillin at 3 hr. intervals.
Hours 0 4 8 12 16 20
Injections (1) (2) (3) (4) (5) (6) (7) (8)

Graph showing blood serum concentrations of penicillin following repeated injections of aluminum-penicillin and plain penicillin.

mixtures approximately doubled the level of penicillin in the blood over that of plain penicillin. There were no local or systemic reactions. The results of this study are presented in the accompanying graph.

DISCUSSION AND CONCLUSIONS

In common with other investigators of this problem of prolonging blood levels of penicillin, we were desirous of finding a method which, by delaying absorption and consequent maintainance of blood levels, could be used so that the treatment of the bulk of injections could be carried out in the offices of the physicians in private practice or in clinics. The results from the patients included in this study indicate that a single injection of 50,000 units or more of aluminum-penicillin will maintain a therapeutic level from 6 to 9 hours. Two injections of 50,000 units at 9 hour intervals would be the minimum dosage to maintain assayable levels for 18 hours. Low dosage of penicillin, as with most other drugs, must take into consideration individual variations in response. In several cases of gonorrhea cures were obtained at low level dosage, but the number is far too few for conclusive statements. However, the practicability of the use of aluminum-penicillin mixtures in decreasing both dosage of penicillin and number of injections is evident. Subsequent tests with aluminum-penicillin and other therapeutic agents may reveal that syphilis as well as gonorrhea may be treated by the general practicing physicians without hospitalizing the patient in rapid treatment centers.

We wish to acknowledge the cooperation and consultation of Dr. T. E. Dodd, Director of Venereal Disease Control, Texas State Department of Health, and Dr. Roger J. Burkhart, Medical Officer in Charge of Riverview Hospital in San Antonio, who made his services available to us and furnished patients for this study.

REFERENCES

1. Mahoney, J. F., and others: Penicillin Treatment of Early Syphilis, 126:63-67 (Sept. 9) 1944.
2. Methods of Analysis, A. O. A. C., 5th ed., 1940.
3. Minimum Requirements of Diphtheria Toxoid, Dec. 19, 1935, National Institute of Health, paragraph 11.
4. Parkins, W. M., Wiley, M. Chandy, J., and Zintel, H. A.: Maintenance of Blood Level of Penicillin after Intramuscular Injection, Science 100:203-305 (Feb. 23) 1944.
5. Raiziss, G. W.: Penicillin in Oil Suspension. Bacteriostatic and Spirocheticidal Agent, Science 100:412-413 (Nov. 3) 1944.
6. Randall, W. A., Price, C. W., and Welch, H.: Estimation of Penicillin in Body Fluids, Science 101:365-366 (April 6) 1945.
7. Romansky, M. F., and Rittman, G. E.: A Method of Prolonging the Action of Penicillin, Science 100:196-198 (Sept. 1) 1944.
8. Schmidt, W. H., and Moyer, A. J.: Penicillin. Methods of Assay, J. Bact. 47:199-209 (Feb.) 1944.
9. Trumer, Max, and Hutter, A. M.: Prolonging Effective Penicillin Action, Science 100:432-434 (Nov. 10) 1944.
10. Zinnamon, B. L. and Seeberg, V. P.: Penicillin Serum Concentrations in Treatment of Gonorrhea by Delayed Intramuscular Absorption, Ven. Dis. Inform. 26:31-34 (Feb.) 1945.

HEALTH CONDITIONS IN CHINA

In spite of immense difficulties arising from the war, the Chinese Health Administration increased the number of hsien (county) health centers from 220 in 1937 to 895 in 1943, thus covering 66 per cent of the hsiens in unoccupied China. Although returns from these health centers represent only a fraction of the cases of epidemic diseases occurring in China, these data suffice to show the trend and geographical distribution of the major diseases.

Under present conditions cholera is perhaps the most feared epidemic disease, although in the long run bacillary dysentery causes more deaths and is said to kill more people in China than any other single disease except tuberculosis. Cholera was widespread in 1939 and 1942, and is now once more ravaging the inland provinces, including the province of Szechwan in which Chungking is located. Like dysentery, cholera is most prevalent in southern China.

China has also experienced a marked increase of louse-borne typhus and relapsing fever during the war. These diseases are most prevalent in northern China, but the incidence is high also in the southern provinces of Yunnan and Kwichow, where flea-borne typhus also is common. The incidence of relapsing fever has increased steadily during the last five years and is now greater than that of typhus. Typhoid fever and smallpox are of common occurrence, but their incidence is apparently not equal to that of dysentery and cholera.

A tremendous task of combating epidemic disease in China lies ahead, once the war is over, but the rapid extension of Chinese preventive action under most trying conditions augurs well for the future.

NEBULIZED PENICILLIN IN THE TREATMENT OF RESPIRATORY INFECTIONS

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For many years the medical profession has been dissatisfied with its armanentarium for treating bronchial infections. We have realized that our efforts had nearly reached the limit of usefulness. Therefore, a conscientious search has been in progress for a more efficacious method of treatment. Apparently our efforts have been rewarded.

The use of nebulized solutions seems to be the answer. This method is not new, for it has been in vogue for some time. Chevalier Jackson twenty years ago advocated the instillation of drugs into the lungs through the bronchoscope, and this is still being done in lung abscesses, where sulfa solution or penicillin is instilled into the abscess cavity itself, after aspiration of the pus. Results have been very good with this method. However, this treatment is rather severe from the patient's standpoint, and not everyone is adept enough to use the bronchoscope; this method, therefore, has limited usefulness.

The use of iodized oils applied to the bronchi by laryngeal instillation is in no sense a recent development. The inhalation of medicated vapors is an ancient and empirical practice. The application of drugs having a special pharmacologic effect, such as epinephrine, and the development of nebulizers which permit very fine subdivision of the solution, has opened the field for inhalation therapy, and the results attained have surpassed those previously obtained by the more indirect methods.

The use of nebulized solutions in the treatment of bronchial conditions was first described by Stacey[3] in 1943, with a report of 5 cases treated. This work was collaborated by Applebaum[1] in 1944, with a report of 50 cases treated. Sodium sulfathiazole, 5 per cent, was the drug used by each of these workers. Treatments were given once, twice or three times a day in chronic bronchitis and bronchiectasis with good results. No ill effects were noted from the use of this drug. An interesting part of this treatment was the fact that although the sulfathiazole solution was nebulized into the lungs, there was apparently no absorption into the blood stream, for the blood at no time showed a perceptible amount of the drug. However, complications can occur with the sulfa drugs, in that sodium sulfathiazole or sodium sulfadiazine when in contact with the mucous membrane, separate into sulfathiazole or sulfadiazine and sodium hydroxide, the latter of which is toxic. This toxic reaction consists of discomfort and swelling of the nasopharyngeal mucous membrane. Also, these patients can be sensitized to sulfa drugs in the same manner that sulfa applied to the skin of certain individuals will sensitize them to further treatment with the drug. One patient who received sulfa nebulization for a period of eight weeks, was given rest treatment for four weeks, and when the sulfa nebulization treatment was resumed became severely dyspenic, cyanotic and went into coma, with death ensuing in twenty-four hours. After this unhappy experience, sulfa has not been used again.

TABLE 1.—*Results Attained in Forty Cases of Respiratory Infection Treated By Inhalations of Nebulized Penicillin.*

Therapeutic Response	Number of cases	No Improvement	Slight Improvement	Moderate Improvement	Marked Improvement
Bronchiectasis	8	1	2	3	2
Chronic Bronchitis	9	1	1	3	4
Subacute Bronchitis	16	0	1	2	13
Acute Bronchitis	3	0	0	0	3
Acute Tonsillitis & Laryngitis	4	0	0	0	4
	40	2	4	8	26

Slight Improvement: Satifactory trend but not symptom free.
Moderate Improvement: Absence of findings except for occasional irritative cough and rales.
Marked Improvement: Total absence of all subjective and objective findings.

Considering the rich circulation of the lung tissue, there is probably no other way in which the desired concentration of drugs can be maintained within the mucous membrane of the bronchial tree, than by local application through the air passages themselves. There are few drugs that diffuse out of the blood in sufficient amounts to affect the composition of the bronchial secretions, but it is precisely in such locations that the inhaled drugs exert their strongest reactions.

Since the fatality with the nebulized sulfa, pencillin alone has been used in treatment. Results with this solution have been so much superior to those with sulfa that there is no need to use the latter with the attendant danger of sensitization and possible death. Thus far no complications have been experienced with penicillin. Solutions in various strengths have been tried, and a saline solution containing 500 units per cc. seems to give the best results. It has been stated by the manufacturers of penicillin that the solution deteriorates rapidly but this has been disproven,[2] for if kept in the refrigerator the solution will remain potent for at least four months and maybe longer.

Read before the McLennan County Medical Society, State Medical Association of Texas, Waco, May 8, 1945.

The method of nebulizing the solution is simple. An oxygen tank with a flow meter and humidifier is connected by a rubber tube to a DeVilbiss Nebulizer No. 40—Two cubic centimeters of penicillin solution are placed in the glass nebulizer, and an oxygen flow of four liters is set. The patient is instructed to hold the nebulizer between the teeth and breathe through the mouth. The treatment usually takes twenty minutes, and is given once a day.

This new plan of treatment naturally gives the best results in the acute and subacute types of infection, but it is also a great deal of help in the chronic infections as well. Unfortunately, this last group of chronic bronchitis and bronchiectasis patients has been sadly neglected, and mainly because of the lack of suitable therapy. No greater sin can be committed in therapy, than to pronounce a cough a case of bronchitis, assume a helpless and hopeless attitude and let it go at that. It is of no therapeutic value to give a bottle of cough mixture to a patient with chronic bronchitis, for no cough mixture can cure this condition, nor will it give anything but very temporary relief. The treatment described here will not cure these cases either, but it will give patients prolonged relief from a distressing cough, and their lives will be made more pleasant. They can be made comfortable and will so remain until a respiratory infection strikes and the condition flares up again. A few more treatments can be given, and again they are comfortable.

In acute tonsillitis, laryngitis and bronchitis, the results are startling. One, two or three treatments give complete relief from fever and other symptoms. The subacute type of infection, such as the streptococcic pneumonitis, will respond to six to twelve treatments given once a day. The chronic infection will require twenty to sixty treatments once daily. In cases of chronic infection, the sputum will be reduced markedly, the temperature will return to normal, or nearly so, the toxic symptoms will diminish and a feeling of well being will be re-established. Virus pneumonia will also respond to this method of treatment even where parental injection of penicillin has failed.

SUMMARY

1. A group of 40 patients with various respiratory infections was treated by the inhalation of nebulized solution of penicillin, 500 units per cc.

2. Of the 40 cases 38, or 95 per cent, of the series received appreciable benefit.

3. The danger of sulfa sensitization is presented for further observation.

4. Penicillin in nebulized form offers a safe and efficacious method of treatment in respiratory infections, both acute and chronic.

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THE USE OF THIOURACIL IN THE TREATMENT OF HYPERTHYROIDISM

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The treatment of hyperthyroidism is at present in an unsettled state. Whether x-ray, radium, iodine, surgery, or any combination of these be used, we still deal with unsatisfactory therapy. Iodinization will affect the metabolism in only 9 out of 10 cases. Of those responding, there is a relative improvement of only 50 per cent. Thus, while some cases are brought to a zero metabolism, others are reduced but slightly and referred to the surgeon in a highly toxic state. Again, there is the factor of refractiveness to iodine and the occasional contraindications such as tuberculosis, skin disorder, et cetera.

Surgery has its risks and its complications —parathyroid tetany, vocal paralysis, hemorrhage, thyroid crisis, postoperative myxedema, and finally, the occasional failure with residual hyperthyroidism.

While we have no answer to the etiology of hyperthyroidism, there is at present promising research in therapy with a new drug, thiouracil. I like to think of its use as a method of chemical thyroidectomy.

The background for the work in thiouracil had its inception in the findings of McKenzie and McCollum in 1941. While working with rats, they observed the following effects from the prolonged use of sulfaguanidine: subnormal growth and development, decreased food intake, and lowering of the basal oxygen consumption. This was immediately recognized as being tantamount to the production of a state of hypothyroidism.

This stimulated a series of experiments in which more than 140 drugs were studied in an attempt to find that one which would produce the most profound depression of the thyroid gland with the least amount of toxicity to the organism. The sulfonamides, aniline derivatives, and urea compounds were the groups studied.

Thiouracil, a sulphur derivative of a urea compound, was selected as having the most profound effect in depressing thyroxin formation with least effect upon the organism. This effect is brought about by a block in the utilization of iodine by the thyroid gland in its formation of thyroxin, which was proven experimentally by the use of radioactive io-

Read before the Bexar County Medical Society, May 10, 1945.

dine in rats. Thus, thiouracil does not destroy thyroid hormone, but acts only in the capacity of preventing the formation of new hormone. This explains why, clinically, there is a latent effect of one to two weeks for the dissipation of stored thyroxin before the thiouracil effect is noted in producing a remission of the disease.

Clinical proof that thiouracil acts only as a block to the synthesis of thyroxin has been accomplished by administration of the drug in cases of myxedema which were simultaneously under treatment with thyroid. There was no inhibition in their clinical improvement due to the fact that the preformed hormone was given artificially, and thiouracil does not break down thyroid hormone.

Histologically, both thyroid glands of animals fed thiouracil, and pathological studies of clinical cases show a marked hyperplasia and increased vascularity at the expense of the colloid content of the gland. This hyperplastic gland is not a hyperfunctioning one; the gland is actually producing less hormone. The hyperplasia and the increased vascularity are side effects caused by a compensatory stimulation by the thyrotropic hormone of the anterior pituitary because of the depressed thyroid hormone production.

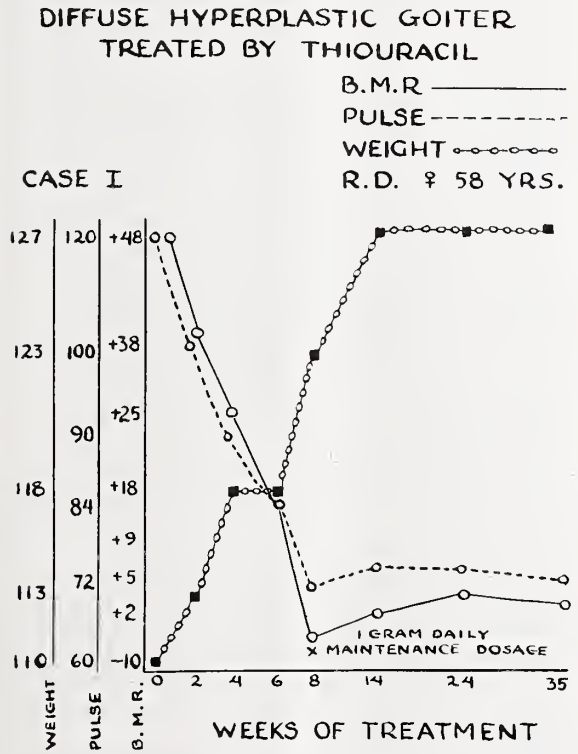

FIG. 1. Chart of patient in case 1, diffuse hyperplastic goiter treated by thiouracil.

The proof that this hyperplasia and increased vascularity are not a thiouracil but a pituitary effect has been shown by the use of thiouracil in hypophesectomized rats. In these there is no hyperplasia or increase in vascularity. Also, should thiouracil be given experimentally concomitantly with the feeding of thyroid, there is again no increased hyperplasia or vascularity since the presence of the preformed thyroid obviates the call for thyrotropic hormone production by the anterior pituitary.

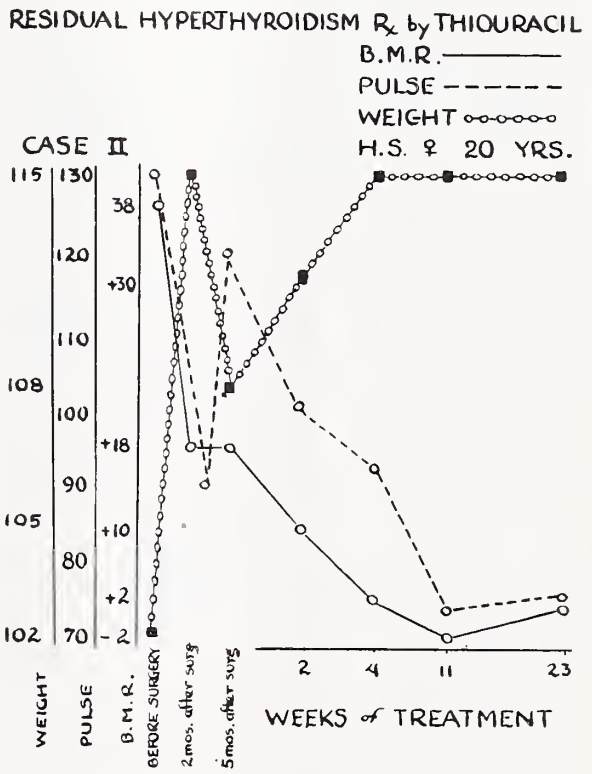

FIG. 2. Chart of patient in case 2, residual hyperthyroidism treated by thiouracil.

Thiouracil is a white, bitter drug which is absorbed through the gastro-intestinal tract very rapidly. High blood levels are reached within fifteen minutes. Since there is also a rapid excretion of the drug, it is necessary to give this drug several times daily for best effect. Most of the drug is carried in the cells of the blood, especially in the white cells.

With the use of this drug, there have been no abnormalities in the serum protein, nonprotein nitrogen, phenolsulfathalien and bromosulfathalein tests, or in the chemical analysis of urines.

Although well tolerated in most cases, there have been rare instances of toxic signs reported. These are very much like those seen with the sulfa drugs. They consist of thrombopenia, fever, urticarial dermatitis, morbillifom rash, lymphadenopathy, and leukopenia with agranulocytosis. The latter

complication has been reported with fatal results by Kahn and Stock. However, their case was complicated by severe diabetes mellitus. In Williams' recent report of 152 treated cases, there were two complications of agranulocytosis. However, prompt withdrawal of the drug and the usual therapeutic measures had sufficed to promote quick recovery. Despite complications, however, the medical consensus of opinion is that this drug is too valuable for the control of thyrotoxicosis to be discarded because of the occasional, although admittedly serious, toxicity. Recent reports in the literature, however, have shown that crude liver extract given simultaneously or pyridoxine will prevent agranulocytosis. High vitamin B complex diets have also been recommended.

I have used thiouracil in 18 cases of hyperthyroidism. All are responding with a decreased basal metabolic rate, decreased pulse rate, normal pulse pressure, gain in weight, and marked clinical improvement. Ten patients are in normal equilibrium and on a maintenance dosage at present. Of these, 6

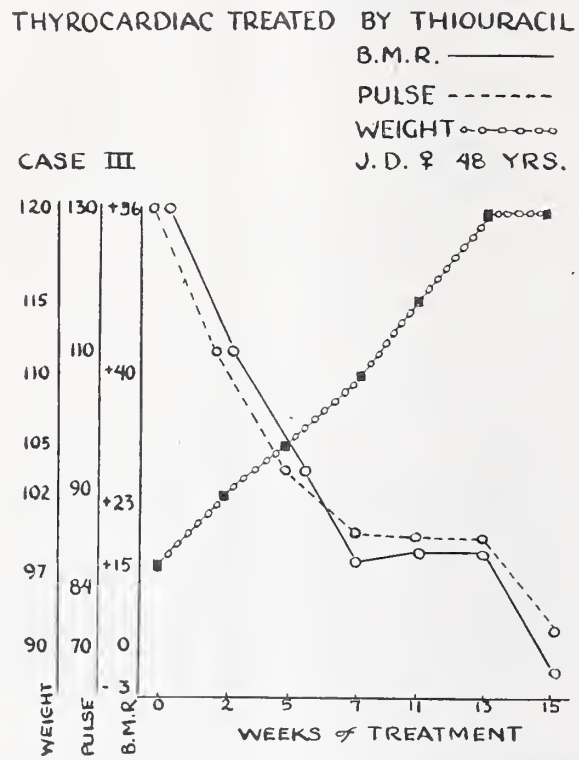

FIG. 3. Chart of patient in case 3, a thyrocardiac treated by thiouracil.

have had normal basal rates for over six months.

Unless there is a serious complication, such as heart failure, hospitalization is not necessary during treatment. It is essential that patients be observed closely in the early stages of therapy to forestall toxic changes and to regulate dosage. They report at weekly intervals for crude liver and pyridoxine injections, leukocyte, and differential counts. The pulse pressure, basal metabolic rate and serum cholesterol are taken. After the second month of therapy, once they are in equilibrium, they are seen at monthly intervals for examinations, but are told to report any unusual weakness, malaise, sore throat, or fever in the interim.

Under thiouracil treatment, hyperthyroid patients maintain a subjective improvement within forty-eight to seventy-two hours. However, the basal metabolism will begin to fall only after a latent effect of one to two weeks because of stored hormone. The basal metabolic rate in severe cases decreases proportionately more rapidly than in mild ones. The average case takes from five to six weeks before the basal metabolic rate is normal. If the patient is given an overdosage, manifestations of hypothyroidism become apparent. A readjustment of the dosage will readily alter this. Should treatment be discontinued within one month after the metabolism has returned to normal, symptoms of toxicity will promptly reappear. Three patients who were treated over a period of six months following which the drug was discontinued, remained in equilibrium for from three to four months before signs of toxicity returned. Patients who had had iodide treatment within one month of the onset of thiouracil treatment were found to be much more resistant to the effect of thiouracil. In such cases it takes much longer for the basal metabolic rate to reach normal because of stored iodine in the colloid gland.

The dosage of thiouracil varies with the individual. The desired amount is the smallest quantity that will produce a normal basal metabolism and a clinical remission of the disease. Usually 0.2 Gm. three times daily for two weeks and then 0.2 Gm. twice daily until the basal metabolic rate is normal is recommended. The patient is then given a maintenance dose of either 0.1 Gm. or 0.2 Gm. daily. This dosage does not require variation once it is established.

In most cases a gross decrease in the size of the gland has been noted, estimated variously at 30 per cent to 40 per cent. In many cases, because of the increased vascularity, the bruit is increased. In one of the cases of hyperthyroidism with severe exophthalmos studied, the exophthalmos became somewhat aggravated under thiouracil treatment. This was accomplished as a direct effect of stimulation by thyrotropic hormone of the anterior pituitary gland and was not the direct result of thiouracil. Clinically, it was found that

this could be prevented by small amounts of dessicated thyroid in dosages of 1 grain daily once the basal metabolic rate was brought to normal by the thiouracil.

Among some investigators, the use of thiouracil has been restricted only to the preparation of hyperthyroid patients for thyroidectomy. It is an ideal method of bringing a patient to the operating room without evidence of visceral strain and in a clinically normal state. Surgical risks, complications, and thyroid crisis incidence are marvelously reduced. In these cases, potassium iodide or dessicated thyroid should be used for seven to ten days before surgery to prevent bleeding caused by increased vascularity.

Many working with thiouracil will send to surgery only the adenomatous glands, because of the high incidence of cancer in nodular goiters, and those glands which, because of size, produce pressure on important structures or necessitate removal for cosmetic reasons. All other cases of hyperthyroidism are being maintained medically on thiouracil in normal equilibrium. There are reports of cases having been studied for intervals of over eighteen months. They continue to show a normal basal metabolic rate and there have as yet been no clinical reoccurrences of the disease.

The future of thiouracil is entirely dependent upon what time will present after it has been used in a great many cases and over a prolonged period of time. There is always the possibility of chronic complications and therapeutic unresponsiveness.

Perhaps continued research will develop an equally potent drug in the treatment of hyperthyroidism with less toxic possibilities.

The following are several of the typical cases of thyrotoxicosis treated with thiouracil.

CASE REPORTS

Case 1. *(Diffuse Hyperplastic Goiter.)*—Mrs. R. D., aged 54, housewife, had been in excellent health until five months previously when she had the onset of nervousness, heat intolerance, sweating, palpitation, dyspnea, and the loss of 20 pounds in weight.

On physical examination her skin was moist, there was a fine tremor of the hands and eyelids, the eyes were prominent, and there was a stare. The thyroid gland was firm and symmetrically enlarged to twice normal. A bruit was heard over the entire gland. The pulse was forceful and its rate was 120. The basal metabolic rate was +48. The blood pressure was 180/90, a pulse pressure of 90. At this time thiouracil treatment was instituted. The initial dosage was 0.2 Gm. three times a day for two weeks; 0.2 Gm. twice daily until the basal metabolic rate was normal; then 0.1 Gm. as a maintenance dosage.

This patient has been in equilibrium for nine months. Her response to thiouracil is seen graphically in figure 1.

Case 2. *(Residual Hyperthyroidism.)*—Mrs. H. S., aged 20, a housewife, was first seen because of nervousness, irritability, and a marked loss of weight since her first pregnancy six months previously.

On physical examination she was extremely restless and apprehensive and showed definite tremor; eye signs were normal. The thyroid gland was quite prominent; the surface was slightly nodular. The

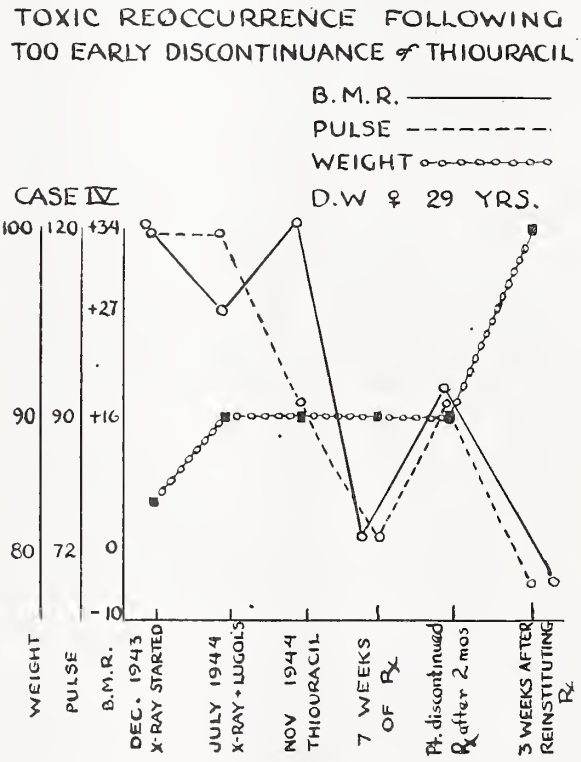

Fig. 4. Chart of patient in case 4, with toxic recurrence following too early discontinuance of thiouracil.

pulse rate was 130, and the basal metabolic rate was a +38. Blood cholesterol was 158 mg.

This patient was prepared with Lugol's solution to a zero metabolism, pulse 72, and sent to surgery. A check-up two months after surgery revealed the patient still toxic with a basal metabolic rate of +18, pulse 90. Five months later the basal rate was unchanged, but the patient was becoming increasingly toxic. Her pulse rate was 120; she was losing weight, and was troubled with insomnia. A diagnosis of residual hyperthyroidism was made and thiouracil therapy started.

In one month, as illustrated in figure 2, the patient was normal and has remained so for five months.

Case 3. *(Thyrocardiac Treated With Thiouracil.)*—Mrs. J. D., age 48, a housewife, was first seen in severe congestive heart failure occasioned by an overactive goiter treated unsuccessfully with iodine for two and one-half years.

The pulse rate was 150, with frequent extrasystoles. There was considerable dypsnea and orthopnea. The heart was markedly enlarged to the left; there were rales in both bases, and the liver was 5 cm. below the right costal margin. There was a 1+ edema of the extremities.

The patient was immediately hospitalized, given oxygen therapy, diuretics and digitalized. After ten days she was well enough for her first basal metabolism test, which was a +56. There was a large nodular goiter three times normal size, definite exophthalmos with all the eye signs of hyperthyroidism. A loud bruit was heard over the entire gland. The

patient was started on thiouracil therapy along with continued digitalis administration. In two months it was no longer necessary to use digitalis. In four months the basal metabolic rate had dropped from a +56 to a —3, there was a weight gain from 97 pounds to 120 pounds, and the pulse was lowered from 150 to 76. It is definitely believed that this patient would not have survived the congestive heart failure without thiouracil. The gland had been reduced to 50 per cent of its previous size, but because of the adenomatous character, this patient will be prepared further with potassium iodide to decrease its vascularity and then will be referred to surgery.

CASE 4.—Mrs. D. W., aged 29, a waitress sought medical attention in December, 1943, because she had lost 30 pounds in six months, had severe palpitation, distressing insomnia, and was very depressed. Her weight was 84 pounds; basal metabolic rate +34; pulse 118, and blood cholesterol, 107. There was a symmetrically enlarged thyroid gland and bilateral exophthalmos. Because of her extreme cachexia, surgery was postponed and the patient was subjected to deep x-ray therapy. Upon a return visit six months later the patient was still toxic; her weight was now 90 pounds, pulse 120, basal metabolic rate +27. She was started on another course of x-ray

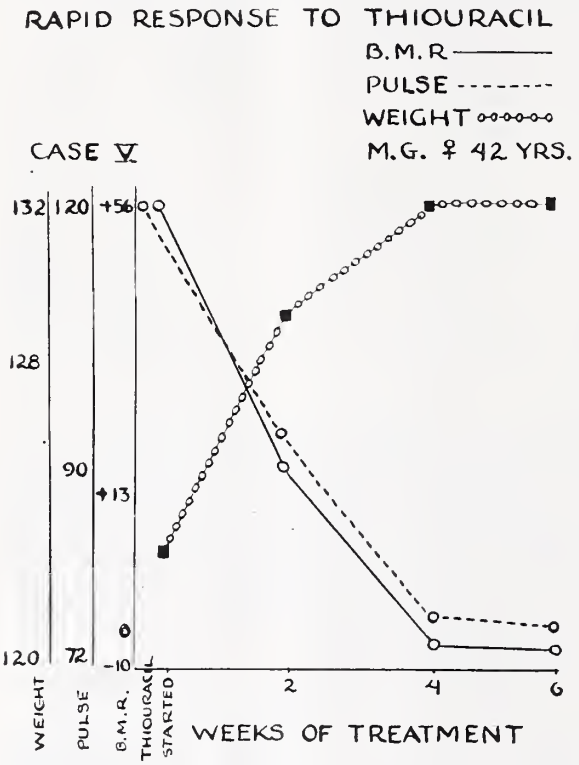

FIG. 5. Chart of patient in case 5, showing rapid response of hyperthyroidism to thiouracil.

therapy. Several weeks later, because of increasing anxiety, the patient attempted suicide by cyanide.

The patient was first seen in our office in November, 1944, at which time she had been taking Lugol's solution for several months without any response. Her weight was 92 pounds, pulse 90, basal metabolic rate +32. Her thyroid gland was firm and enlarged. There was some exophthalmos. Thiouracil therapy was started. Seven weeks later the basal metabolic rate was a +3. Although she had not gained any weight, her pulse had dropped to 72. She was in excellent frame of mind and went back to work. The patient was seen two months later after having discontinued thiouracil without the doctor's consent and, again, was becoming toxic. Her basal metabolic rate was up to +16, and the pulse rate 88. She was again placed on thiouracil therapy and in three weeks was found to have a —8 basal metabolism, weighed 96 pounds, and had a pulse of 72. She has been placed on a maintenance dosage and has been well for the past two months of observation.

CASE 5. *(Rapid Response to Thiouracil.)*—Mrs. M. G., aged 42, seamstress, consulted a physician two years ago because of a history of cessation of menstrual periods, nervousness, loss of weight, and palpitation. After six months of therapy for menopause without response, her doctor noticed progressive enlargement of the thyroid gland. A basal metabolic rate at that time was +63. The patient refused surgical treatment of her toxic goiter and was given several courses of x-ray therapy with poor results. The menstrual periods, however, recurred and have been regular since without any further estrogenic therapy.

She was referred for thiouracil therapy. Physical examination revealed classical hyperthyroidism. The blood pressure was 190/80. The pulse was 120 with occasional premature systoles. There was a definite exophthalmos. The thyroid gland was enlarged bilaterally, and a loud bruit was heard. The basal metabolic rate was +57. Thiouracil therapy was instituted. The patient was seen two weeks later when the basal metabolic rate was reported as +13. One month after institution of therapy, the basal metabolic rate was a —1.

This has been a most rapid response to thiouracil. The thyroid gland has decreased 50 per cent in size, the pulse is now 76, and the blood pressure 160/80. The patient has gained some weight and maintains she has never felt better. At present she has been placed on a maintenance dosage of 0.2 Gm. daily without any return in toxicity.

ABSTRACT OF DISCUSSION

Dr. Henry Leopold, San Antonio: Dr. Cooper is to be highly commended for a painstaking interest in the use of thiouracil in hyperthyroid patients. He has had a long series of successfully treated cases, some of which have been in remission for a number of months. His cases have been adequately studied and carefully controlled, and his results have been amazingly good. It is because of the fact that his results have been this good that I thought I could serve best in discussing his paper by analyzing the toxic effects of thiouracil and by quoting from the experience of outstanding men in regard to the use of this drug.

My experience in the treatment of patients with thyrotoxicosis has been less than that of Dr. Cooper, but some of my results have been good.

Since one receives no warning about toxic drug effects before they occur, I always have a feeling of slight uneasiness in cases being treated with thiouracil.

Gargill and Lesses of Boston reported 43 cases in which thiouracil was given to patients with thyrotoxicosis. Eight developed toxic reactions of importance; there was 1 fatal case of agranulocytosis and 1 nonfatal case of granulocytopenia; 2 cases of jaundice; 2 cases of drug fever; and 2 cases of submaxillary gland fever. The fatal reaction developed after 1 Gm. daily of thiouracil had been given for a few days, then 6 Gm. No predictable blood changes existed prior to the development of agranulocytosis.

Kahn and Stock reported fatal agranulocytosis in a 62-year-old diabetic, who received 30 Gm. of thiouracil in a period of fifty-four days.

Ferber reported a fatal case in the March 17, 1945, *Journal of the A. M. A.* Himsworth reported a fatal

case of agranulocytosis in 1944, Astwood, a fatal case in 1943.

Williams, in a recent review of 125 cases, reported 2 cases of agranulocytosis.

Williams and Clute, in a report of 72 cases of thyrotoxicosis in Boston, treated with thiouracil, reported 1 case of agranulocytosis and numerous milder toxic reactions.

Virginia Palmer in Baltimore reported 50 cases with no severe toxic reactions.

Edward Rose of the University of Pennsylvania, reported 37 cases of thyrotoxicosis, with 8 cases exhibiting untoward reactions.

Elmer Bartels reported 11 cases from the Lahey Clinic in Boston, with no severe toxic reaction.

The exact number of cases of agranulocytosis which have resulted from the use of thiouracil is not known, but more and more are being reported. No known method of preventing severe reactions has been discovered. Pyridoxine was reported to have both preventive and curative properties in reactions due to thiouracil, but in two Canadian cases reported to Doan and his group this procedure failed. Liver extract, ascorbic acid, and folic acid have been tried without success. The administration of soda with thiouracil will prevent crystallization of the drug in the kidneys.

No known warning signals are available with thiouracil. One day the blood is normal and the next day agranulocytosis is present. Curtis, Doan and Wiseman are working on this problem at Ohio State University and are trying to find significant hematologic changes that may warn of impending disaster. Bone marrow studies have failed to give warning of imminent reactions, as have plasma and iodine studies.

We are dealing, therefore, with a drug whose ability to control thyrotoxicosis is unquestioned regardless of which type of goiter produced the toxic state and simultaneously with a drug which not infrequently produces severe and at times fatal reactions.

The indications for the use of thiouracil are by no means clear. All adenomatous goiters whether toxic or non-toxic should be removed surgically. This includes fetal adenomas which so often become malignant; lateral aberrant thyroid tissue in which premalignant tendency is even greater; and the diffuse, nodular thyroid in which the danger of malignancy is more remote, but pressure symptoms, hemorrhage and cosmetic alterations are more pronounced. Toxic adenomatous goiters should only be prepared for surgery with thiouracil.

The exopthalmic hyperthyroid state, called Grave's Disease, is the most logical situation in which to give this drug.

Here again, in some cases, it may be useful to prepare the cases for surgery. In others, it may be used in order to achieve a remission from the disease. It may be useful in treating recurrences which medical practitioners, as well as surgeons, are only too aware of. It is particularly useful in the young where surgery is unsatisfactory and, perhaps, in the aged where it may not be feasible. It is useful where iodine fastness exists and in those cases where iodine has failed to properly prepare a patient for surgery.

The blood count of the thyrotoxic patient is that of leukopenia and granulocytopenia, which may render these patients particularly susceptible to hematopoietic insult.

The liver has lost its reserve of glycogen in thyrotoxicosis and is easily injured by many drugs and alcohol, and also by thiouracil.

The mortality from properly done thyroid surgery is negligible compared to that from thiouracil, and it seems to be that in its present state of usage, one can only regard this drug as a step in the correct direction. The arguments against surgery are too well known to bear much discussion, but they are chiefly recurrence and the fact that the thyroid gland is but a secondary factor in the syndrome of Grave's Disease. Thiouracil looks upward and onward in the correct direction, but is not ready for general use, and is as yet only a partial answer to the distressing problem of thyrotoxicosis.

KEROSENE POISONING

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FORT WORTH, TEXAS

During the years of 1943 and 1944 there were 28 cases of poisoning caused by the ingestion of kerosene, admitted to Saint Joseph's and City-County Hospitals, Fort Worth, Texas. Kerosene was the most common accidental poisoning in children during this period. All of the children were under 2 years of age. The general practitioner cares for the great majority of these patients. Only one of the 13 patients at Saint Joseph's was seen by a pediatrician. In the 28 cases there was one death, and 5 patients developed pneumonia.

The amounts of kerosene ingested varied from one swallow to one or more ounces. The emergency treatment consisted of gastric lavage, emetics, stimulants, and oxygen, although no one patient received all of this. Two of the patients received barbiturates, one received sulfathiazole, and one penicillin.

There are marked differences of opinion regarding the dangers of treatment and toxicology of kerosene poisoning. It occurred to me, while reviewing the literature on this subject, that possibly the deaths have been in part the result of the recognized and standard treatment used today on these patients. This statement should be kept in mind during the remainder of this discussion and while I shall review some of the rather tedious, yet important clinical statistics.

The deaths that have been reported in children following ingestion of kerosene, have occurred in children less than 21 months of age, and all died as the result of pulmonary complications. It is to this age group and to the pulmonary complications that special attention should be paid. The mechanism by which the lungs are affected is still in some debate. Holt states in his book that the kerosene is rapidly absorbed in the stomach and excreted through the lungs where it appears to cause local irritation and diffuse pneumonia. This view has been disputed by a number of pediatricians and research workers during the past few years. Lesser and others introduced by stomach tube a large amount of kerosene into the stomachs of six rabbits; these animals do not vomit. They were unable to find any evidence of pneumonia in these rabbits by x-ray study or autopsy. In six other rabbits from 0.75

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to 2 cc. of kerosene were introduced into the trachea with a needle and in each rabbit there was a massive overwhelming consolidation of both lungs.

Lesser's clinical observations of 33 consecutive patients of kerosene ingestion, in children from 1 to 3 years of age, were almost identical with those seen in our hospitals. The most outstanding observations were that all children had a temperature rise varying from 99 F. to 105 F., lasting for about three days; most of the patients had a cough, most of them vomited, and most of them recovered spontaneously. Of the 33 cases there were 2 deaths; 8 patients showed evidence of clinical pneumonia, 2 of these developed pleural effusions, and 1 had empyema. It is in regard to this point that Lesser is in marked disagreement with the diagnosis in the hospitals and as reported elsewhere. He routinely made x-ray studies of his patients and found that 25 to 77 per cent of them developed definite pulmonary manifestations. His criteria of pulmonary involvement consist of the appearance of fine or coarse mottled confluent or non-confluent densities and diffuse densities in the lung fields. Peribronchial reactions seen on several occasions were not considered as pulmonary. It was found that in practically every case there was evidence of lung involvement in about four hours. His autopsy findings were essentially those found by others and those in a case reported here.

Farabough, reporting a number of cases in 1936, had little to add, except for the statement that all deaths occurred in from three to forty-eight hours, and without x-ray study, it was found that from 39 per cent to 43 per cent had lung involvement..

Thirteen cases of kerosene poisoning have been treated in Saint Joseph's Hospital in the last two years, with a diagnosis of lung involvement in only 3 cases, which is far lower in number than reported by others. X-ray studies in 2 of these cases showed marked consolidation, and in 1 of these there was no evidence of clinical pneumonia at the time the x-ray examination was made. One of the patients died, a report of which case follows:

REPORT OF A CASE

A 16 month old white male baby drank kerosene two days before admission to the hospital. He drank approximately one tablespoonful of kerosene and immediately had a paroxysm of coughing and vomited two times. Within a few minutes he was taken to a physician, who reassured the mother and gave the baby a prescription of phenobarbital. On the following day, the mother, dissatisfied with the child's progress, brought him to the Emergency Room of Saint Joseph's Hospital, Fort Worth. The child was seen by the intern and a private physician. At this time the lungs were clear to auscultation and percussion. Respiration was slow, there was no cyanosis and the child was very drowsy. The drowsiness was attributed to the phenobarbital, which was discontinued, and the child was dismissed. On the follow ing morning the child was seen again by a private physician, and though no consolidation was found in the lungs, was sent back to the hospital because of continued drowsiness and rapid respiration.

The child was in serious condition when it arrived at the hospital. He was semicomatose, cyanotic, had difficult breathing and showed gross consolidation in both lower lung fields. He was given large amounts of stimulants and inhalations of oxygen, but grew steadily and rapidly worse, and died about one hour after admission. It was thought at the time that it was possible to follow the rapid spread of the consolidation from the pulmonary bases as it approached the apex, but later findings indicated that probably the rapid increase in areas of dullness was due to pleural effusion that came near the end of life.

The body was examined about three hours after death and after having been embalmed by arterial injection. There was nothing remarkable externally, except for a slight distention of the abdomen. In the thorax both pleural spaces were filled with thin cloudy green tinged fluid, about 250 cc. each. The lungs were contracted, firm, reddish-brown except for small areas of air-containing tissue in the left upper lobe. The large bronchi contained a small quantity of frothy mucus. Microscopic sections from the lungs showed alveoli filled with fibrin and leukocytes. There were large areas of consolidation separated by small air-containing alveoli. In some areas the alveolar walls were indistinct; these sections consisted chiefly of mucus and leukocytes. The small bronchioles were filled with mucus. The pericardial sac contained about 5 cc. of light yellow fluid. The left half of the heart was contracted, and the right side dilated. No inflammatory changes, hemorrhage nor valve lesions were found.

The stomach was dilated, contained air and about one ounce of thin brownish-gray fluid. The mucous membrane was remarkably free of rugae. The mucous membrane surface had a motheaten appearance produced by numerous small superficial ulcerations. Other autopsy findings were essentially negative. The positive findings in this case were: bilateral pleural effusion, bronchopneumonia, pulmonary edema; dilation of the right heart, and dilation of the stomach and numerous small ulcerations of the stomach mucosa.

These findings need no other comment except that, so far as I have been able to determine, this is the only case in which the ulcerations of the stomach have been reported.

SUMMARY

An analysis of the outstanding features of 28 cases of kerosene poisoning is given with a report of a fatal case, including autopsy findings.

PENICILLIN IN RAT BITE FEVER

Four babies, all under six months of age, were treated successfully for rat bite fever with penicillin, Warren E. Wheeler, M. D., Detroit, reports in the April issue of the *American Journal of Diseases of Children*. The treatment of infections due to rat bites thus far has been unsatisfactory. The sulfonamide compounds have no effect on the microbes causing the infections, and treatment with the arsenicals has given doubtful results. Doses of 5,000 units of penicillin were injected intramuscularly into the four babies every two to three hours for a week to 10 days. This seemed sufficient, the physician stated, to control the rat bite infection.

THE VENEREAL DISEASE CONFERENCE

GARLAND P. FRANKS
Assistant City Manager
WICHITA FALLS, TEXAS

When strong and valid points of view come into conflict over a problem as vital as the control and prevention of venereal disease, there will be marked differences of opinion regarding responsibilities for its solution.

In Wichita Falls this problem was brought to a rapid focus in the latter part of 1941 when Sheppard Field, an army air force technical training school, was erected six miles from the city and soldiers as well as civilian personnel attached, moved into the vicinity. Their number more than doubled the population of the city. Their immediate need for recreation soon discovered all available outlets, with the result that dance halls, theaters, bowling alleys, beer taverns, honky-tonks, and professional houses were soon taxed beyond any anticipated capacity to provide full accommodation.

The venereal disease rate climbed rapidly. And with the climb came the question of responsibility for control.

Social workers and the clergy held to the point of view that the problem was one of moral aspect. The police and prosecuting agencies sought immediate suppression through intensified vice squad operations and a multiplied filing of vagrancy charges. The educators sought the field of greater dissemination of facts. The medical group insisted upon cure and quarantine. All were correct in their measure, but none was comprehensive. Each was like the blind man examining the elephant for the first time. And none would or could take the responsibility for remedy.

Out of this mass of misunderstanding grew the beginning of the Friday Morning Conference. All agencies with an interest in the problem were requested to attend a forum meeting. There were representatives from the city, county, health unit, the county medical society, the school system, the various policing agencies, including local, state and federal officers and the provost marshal's office, the judges of the various jurisdictional courts, the prosecuting attorneys, the juvenile authorities, the welfare agencies, the U.S.O., officers from Sheppard Field, including the medical inspector of the post, and the city manager.

The problem was discussed, points were strongly argued. The perennial question of the "red light" district was tossed into the flames, as well as the old issues of segregation versus repression, of promiscuity versus prostitution. All difficulties of control were laid honestly and bare upon the forum table.

Agreement was not immediate, but the Friday Morning Conference was started. The city manager was designated as the chief organization officer. His peculiar station as head of the municipal government, together with the fact that practically all the trouble was occurring within the corporate limits of the city, gave him the logical chairmanship.

The group was classified into six main divisions: health officials, military officials, law enforcement bodies, church and welfare workers, educational and publicity groups, and judges and attorneys. A common policy was adopted, with full responsibility for achievement falling directly upon the Conference body instead of upon any part or organization making up the Conference membership.

The policy, briefly, was to treat venereal disease as a disease, with diminished emphasis upon any immorality involved, and practically no penalty of prosecution from the law enforcement groups and the courts. This sounds simple enough to relate. It actually required many days of painstaking persuasion and deliberate campaigning to accomplish.

Credit for sincere interest in reducing the venereal disease rate in Wichita Falls and adjacent Sheppard Field must necessarily go in tremendous measure to the broadmindedness of those men and women, who beginning without the perspective of the medical man, nevertheless subordinated their own convictions to a plan common to all and loaned their concerted energies toward the prosecution of that plan. Prejudices soon became prominent by their absence. In no other manner could the resulting success of the Conference have been accomplished.

With the policy of procedure then clearly defined, the problems at hand next became immediate. Where were the contacts being made? By whom? What type of girl was involved? What were the circumstances of her life in the community? Was there a third party assistance to the contact, for example, by taxicab drivers or hotel porters? What part in the problem was played by the theaters, the hotels, the night clubs, the U.S.O., the grassy hideouts in the city parks? Questions like these were in the hundreds, and answers to all were equally essential.

The police department and the military police, together with the sheriff's office, began their job of finding the soldier and the woman. The welfare workers investigated backgrounds as far as possible and helped return wandering girls home. The venereal

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disease control officer and his staff examined suspects and treated infected persons. The prosecuting attorneys and judges gave legal advice. No prosecutions were recorded. The disease was treated as a disease. A concentrated area in the eastern section of the city, for many years the habitat and residence of a colony of prostitutes, was cleaned out in an amazingly short time. Second story hotels were combed over and their "women for hire" ordered out of town.

Hotel operators, motor court operators, taxicab operators were invited to join the Conference and to cooperate in the work. Their response was gratifying. They came to the Conference and had many practical suggestions to make. Their cooperation was asked in helping keep from their rooms and houses any persons not recognizable as legitimate guests. Their response was good. They assisted many times by voluntary advice to the police authorities or the military police. Taxicab operators in many instances discharged drivers found responsible for solicitation, or in the use of the taxicab vehicle for cohabitation.

Thus the Friday morning Conference began to perform.

What was to happen to the girl who was picked up by the police? What if the girl were local, lived with her family, was a "prominent" girl, or what happened if the "influential citizen" came to the rescue? The answers to these questions constituted the heaviest duty imposed upon the Conference. Work procedures followed somewhat along this line:

Civilian and military police patrolled together in making investigations and any arrests. When a man and woman were brought into detention, the man, if a soldier, was immediately consigned to the military police. The woman was questioned, booked on the regular police pad, and jailed. If, however, the woman should prove her identity as a person residing locally and permanently, with a family to whom she could go, she was released with the order to report at a specified time to the venereal disease control officer at the health unit for routine examination. Those placed in jail were women not having permanent residence, or women known to be of such character as to require enforced detention in order to assure appearance before the venereal disease control officer.

The following morning a police officer released all women from their cells and carried them by police car to the health unit for examination. Those women released the previous night on their promise to return, usually came in at the specified time. Those who didn't were again placed under arrest and carried to the health unit. Detention, amounting to quarantine, was enforced upon each woman so examined until a report of the findings of the physician could be made.

A negative diagnosis in any case resulted in the immediate release of the woman held. A positive diagnosis resulted in immediate and actual quarantine, still following the same lines of first detention or instruction while curative measures were being pursued by the venereal disease control officer.

The jail soon became overcrowded, however, and an arrangement was made by the city and county with the operator for the county home for the aged and indigent to use a complete dormitory for segregation and quarantine.

Those women placed on quarantine in their homes were kept under surveillance by the local officers and the venereal disease investigator, the latter working under the direction of the venereal disease control officer. A woman found violating her quarantine was placed in the county jail or in the dormitory at the county home.

Full and strictly confidential records of all women were kept. No formal charges were brought against anyone and no stigma was allowed to stamp a patient socially. This effort, although difficult, was nonetheless the single factor leading to confidence in the program. In spite of heated discussions and frequent disagreements, the work of the Conference continued and a diminishing venereal disease rate pointed unmistakably to the soundness of the policy by which the program was succeeding.

Each Friday morning the Conference met. With rare exception the conference table was filled and seats in the health unit auditorium, in which the discussions were made, held many who could not find places at the table. The city manager presided. Reports from the venereal disease control officer were read, reports from the Sheppard Field medical inspector were given. The chief of police, the provost marshal, the county juvenile officer, the sheriff or his representative, the venereal disease investigator, the captain of the state police, the district attorney, the county attorney, the county judge, the children's aid director, the social worker's representative from the U.S.O., the serologist, the bacteriologist, the hotel managers or a representative, the taxicab companies' representatives, the tourist court representatives, delegates from the public schools, nurses and doctors all made their reports of work done. Questions were propounded for discussion and frequently criticism offered of work undone or performed irregularly. From the decisions made at that meeting, the work of the following week was planned and performed.

The local newspapers were sympathetic from the start and gave many inches of space to the work being done. The Junior Chamber of Commerce sponsored a program of adult education and prepared a paper on the mechanics of setting up a Friday Morning Conference, which was sent to those cities over the state asking assistance in their own work of venereal disease control. Sound films were shown first to members of the Conference and later to various luncheon clubs as a matter of public education. Speakers were assigned from the Conference to make addresses before groups in many communities neighboring Wichita Falls. The city school planned and placed into execution a scheme of family relations education. An organization known as the Community Youth Forum was begun and has since done an excellent job in juvenile diversion, directly contributing to the Conference work. A radio program was prepared and presented locally in round table discussion of questions and answers.

The Friday Morning Conference was organized in February, 1942. In two and one-half years it achieved a satisfying success in venereal disease reduction as the result of its program. Many phases of its work were adopted by other communities. The rate had not risen beyond a certain low figure for many months. The work was being sustained at a recognizable top level.

But one morning into the Conference was introduced a set of totally new and shockingly high figures of venereal disease rate increase. The conference was shaken. Such a thing could happen to a community without proper organization against the disease and the proper vigil. But it was difficult to understand how the rate should again start into an ascending line with a program such as Wichita Falls had built still apparently functioning well. And an apprehensive Conference suggested that perhaps next month's tables would disclose a decline back to the achieved level.

But when the conference met the next week, instead of a month later, the rate showed a still higher figure. And when the third week indicated another climb, it became alarmingly obvious that the machinery had broken down somewhere. Analysis of work in each division having responsibility was begun. Extra care was taken by the policing bodies in their patrol of hotels, streets, clubs, parks, even homes.

Slowly at first, but quite surely as the pieces of information sifted through and formed the integrals of a jigsaw puzzle, the answers began to come into view and a picture was formed. And from this picture came these findings. At Sheppard Field a totally new type of personnel had been assigned, beginning in September, 1944. Returned veterans were taking the place of inductees. These veterans had a new attitude. Discipline was not an easy measure with them. Their lives had been lately moulded along lines far different from the young soldier entering service for the first time. Their introduction to the army camp, and subsequently to the community, was established definitely as one contributing reason for tne sudden venereal disease rise. From the files of the venereal disease control officer and the blotter of the police department came another conclusive discovery. Many women and girls were found to be repeaters not once, twice or three times, but even seven, eight and ten times. These repeaters were found to be still as promiscuous after treatment and release as before. These repeaters were spreading the greater part of the infection, and were partly responsible for the new increase. The professional prostitute, discovering the lack of penalty from the courts, went out into the residential districts and became an established citizen, while continuing her trade. When located, she too became a repeater and was sent to the rapid treatment center in Mineral Wells, to be able to return within an average of ten days, "cured" without expense and a welcome vacation in the bargain.

The attitude of a certain number of the town's citizenship was also found to be quite the opposite from what it was felt the educational program on venereal disease had established. In talks before service clubs, speakers were discovering that an unexpected number of men still favored segregation of the prostitute as the answer to venereal disease control. This unquestionably established an increased need for greater dissemination of experience discovered by those officials who have had the job in their hands for such control and have learned their facts from bitter trial and error.

Certain hotels had begun to relax their sincerity in cooperation with the Conference and were permitting multiple renting during a single night. One hotel had even gone so far as to permit a porter to descend to the street and there, familiarly seated on his obvious chair in the doorway, to solicit openly.

Briefly, disintegration plus the introduction of one new menace, had begun to break down the job. Perhaps the Conference had become too routine. Perhaps the invariable human trait of pride in accomplishment had stalemated the work and the senses of the Conference were dulled beyond recognizing old, familiar dangers.

Whatever the causes, the Conference mem-

bers went to work again with the same seriousness of purpose as at the onset.

The repeater, it was decided, would no longer be given the advantage of a free ride with all expenses paid. Policing officials and judges of courts having jurisdiction would invoke penalties for vagrancy in cases of open promiscuity. The treatment policy, however, would still continue. Following the treatment, fines and jail sentences would be applied so far as the courts had the power. First offenders still would be afforded treatment without fear of any form of penalty or ostracism.

A new program of education, revitalized, will now be introduced through all media accessible to the work of the Conference. The local medical society has been invited to take a more active part in the program. The radio program, discussing the problems through question and answer forum will be a regular feature. More health films and lectures will be presented through a well-organized system of service club programming. The city council is already stressing the importance of a "clean bill of health" for all applicants for taxi driver's permits. Renewed work by the vice squads has already been inaugurated. The ministerial alliance is lending its forces to a renewed emphasis upon moral values, greatly augmenting the single working policy of the Conference.

Statistics are beginning to show results of this renewed work by the Conference. Once again the venereal disease rate in Wichita Falls is being reduced. The first offenders are specifically not penalized but repeat offenders are finding it increasingly difficult to continue their offenses. Military authorities are handling the problem of their own men by their own methods. Vigilance is the continuing watchword.

The Friday Morning Conference has found the formula for combating venereal disease. It has discovered the strength in sitting at a table and developing a common strategy through opposing points of views. It has learned to recognize danger through the unfamiliar as well as in the routine. It is convinced that the venereal disease problem is never so great but continued, concentrated and purposeful teamwork can reduce its danger to a minimum.

ABSTRACT OF DISCUSSION

Dr. Robert T. Potter, San Antonio: I think we will all agree that Mr. Franks' paper offers some extremely worth-while ideas to all interested in the field of venereal disease control. Certainly Wichita Falls has inaugurated a splendid cooperative program using all available community resources to combat the spread of venereal diseases.

San Antonio has a similar but smaller conference which meets every two weeks. This conference is known as the San Antonio Venereal Disease Control Committee. Its permanent membership includes the venereal disease control officers of all the adjacent military installations, representatives of the Health and Police Departments of San Antonio, and representatives of the Social Protection Division of the Federal Security Agency. With this smaller membership, it is able to function similarly to the Wichita Falls plan by virtue of the fact that guests, representative of various groups, are invited to participate in its meetings. These guests represent such organizations as the church, the juvenile authorities, the legal profession, and so forth.

I feel that the keynote of this paper is community action. Venereal disease is not a medical problem alone, but rather one affecting the socio-psychological and moral life of a community. Only if all cooperate, can venereal disease be eradicated. Especially now with more rapid treatment, it becomes imperative that the community recognize venereal diseases with their ramifications, for what they are and unite in the fight against them.

VAGINOPERITONEAL FISTULA WITH CHRONIC PERITONITIS FOLLOWING VAGINAL HYSTERECTOMY

E. W. BERTNER, M. D.
AND
K. C. VON POHLE, M. D.
HOUSTON, TEXAS

Serious complications following vaginal hysterectomy are rare. We were unable to find a report of a similar case in the literature. We feel, therefore, that this case may be of some value.

A. D., a 40-year-old negress, entered Hermann Hospital October 9, 1943. Her chief complaints were: weight in the pelvis of four and five years' duration, and left lower quadrant pain of four months' duration.

Present Illness.—For the past four or five years she had had a sense of increasing weight in the pelvis, with a bearing down feeling. This was made worse by standing, lifting, or straining. At times she complained of a slight incontinence. For the past four or five months she had had a dull aching pain in the left lower quadrant. This pain was well localized, constant, and not referred.

Menstrual History.—The menses began at 14, were of the regular twenty-eight day type, no pain, and no abnormal bleeding. The last menstrual period was twenty-eight days before the patient entered the hospital. She had had one pregnancy terminated by a full term, viable infant. Parturition was normal.

The past history and systemic history were essentially negative.

General physical examination was essentially negative except for the pelvic findings. The abdomen was obese with no palpable masses. There was no pain or tenderness on palpation over the costovertebral angles, and slight tenderness to deep palpation in the left lower quadrant. The external genitalia were normal.

Vaginal examination showed no vaginal discharge, and a marital introitus. The urethral, Skene's, and Bartholin glands were normal. The perineum was relaxed and inadequate, and there was also relaxation of the anterior vaginal wall, with angulation of the urethra. The cervix was enlarged, cystic, everted, and eroded; it was in the midline and movable and did not cause pain in motion. The body of the uterus was enlarged two or three times the normal size, with first degree retroversion; it was in

From the Department of Gynecology, Hermann Hospital, and Baylor University School of Medicine, Houston, Texas.

the midline, movable and non-painful on motion. The adnexa were moderately tender on the left side with slight thickening; there were no palpable masses on either side.

The diagnosis was (1) second degree cystocele; (2) urethrocele; (3) rectocele; (4) fibromyomata uteri.

Laboratory data showed a sedimentation rate of six hours with the Linzenmeier's method. The red blood cells were 4,600,000; hemoglobin 80 per cent; white blood cells 11,000, with 50 per cent polymorphonuclears. The urine showed no albumin and no pus cells.

Operation.—Decision was made to operate on the patient by the vaginal route. On October 12, 1943, vaginal hysterectomy, accompanied by anterior and posterior repair, was performed. Dense adhesions were encountered between the sigmoid and fibroid nodule of the fundus. Other than this the operation was not unduly difficult.

Progress Notes.—The postoperative course for the first two days was as expected. However, on October 15, 1943, the patient became febrile and the temperature reached 104 F. at 8 p. m. Examination at that time revealed marked tenderness in the left costovertebral area. A diagnosis of left pyelitis was made. Chemotherapy was started and a catheterized specimen of urine was sent to the laboratory for examination. The urinary finding confirmed the diagnosis. The patient continued to have fever of 103 F. to 105 F. daily. Consultation was, therefore, asked with the Urology Department and she was seen by them first on October 17, 1943. In this interval the patient had been treated by forcing fluids and by sulfathiazole therapy. On October 22, 1943, bilateral ureteral catheterization was done. No obstruction was encountered; catheters were left in place. Culture of the urine showed Bacillus coli infection of both kidneys.

On October 24, 1943, the patient began to have profuse vaginal discharge. Because of this a bimanual examination was done, and high in the vaginal vault an opening of a sinus tract could be visualized. In the belief that this opened into a pus pocket behind the anterior vaginal wall, the opening was enlarged to facilitate drainage. From October 24, 1943, to November 8, 1943, the patient's condition remained about the same. The temperature would reach 103 F. to 104 F. daily. She continued to show some bacteria and pus cells in the urine. The left costovertebral tenderness continued. During this interval the patient was treated with general supportive measures of transfusions and vitamin therapy. Due to the lack of response to sulfathiazole it was discontinued and treatment with urophosphates was instituted. After the urinary culture report had been returned the patient was given 15 gr. of sulamyd every four hours.

On November 10, 1943, a roentgenogram of the chest was made and reported negative by the Roentgenology Department. A roentgenogram of the abdomen made at the same time suggested some type of subdiaphragmatic pathology on the right. There was no evidence of a foreign body in the roentgenogram. Vaginal examination showed no evidence of any foreign body.

On November 19, 1943, the patient was again taken to the Cystoscopy room and No. 6 flute catheters passed to the pelvis of each kidney. Indigo carmine dye appeared in the urine from both sides in five minutes after being injected in the antecubital vein. The urologist reported the genito-urinary tract normal at this time. A blood culture on November 22, 1943, was reported negative for bacteria.

On December 2, 1943, the sinus tract which was seen opening into the vagina was injected with iodized oil and roentgenograms of the abdomen and pelvis were made; from these the roentgenologist reported the presence of the vaginoperitoneal fistula, the iodized oil having outlined the contour of the bowel throughout the abdomen. A barium study of the colon at this time was reported as being normal.

During this time the patient had no complaints other than the foul vaginal discharge; however, she had fever ranging from 98 F. to 104 F. daily. Because of the continuance of these two factors the patient was presented to the Gynecology Staff, and it was their opinion that the patient should have an exploratory laparotomy. It was felt that she must have a localized abscess in the pelvis.

On December 16, 1943, an exploratory laporatomy was done. The peritoneum was found markedly injected and thickened, the bowels were densely adherent to each other and showed the typical results of a massive peritonitis. The subdiaphragmatic area and perirenal areas were free of any pathology. There was no collection of pus in the pelvis and no foreign body was found. Drains were placed into the pelvis and into the general abdominal cavity. The abdomen was closed in layers. Cultures taken from the abdominal cavity were reported negative for bacteria. The pathologist's report on the biopsy specimen of the peritoneum revealed only a chronic peritonitis with calcium deposit.

Following surgery the patient's course was much the same as previously, the temperature ranging from 98 F. to 102 F. daily, but subjectively the patient never felt sick. All the drains were removed by the seventh day postoperatively and the abdomen was well healed, except for the drainage site, within ten days. The patient continued to have a profuse vaginal drainage and also profuse drainage through the drain wound in the abdomen. Drainage from both areas were of the same character. On January 11, 1944, the patient was given fever therapy and the temperature was raised from 105 F. to 107 F. for four hours. This was repeated on January 14, 17, and 24th. A direct smear of the vaginal drainage from the sinus on January 24, 1944, and February 14, 1944, was reported as containing Staphylococcus albus and Staphylococcus aureus. The patient continued the same and she was given no treatment other than general supportive measures such as transfusions and vitamin therapy.

On February 14, 1944, 500,000 units of pencillin became available and she was given 100,000 units intramuscularly during each twenty-four hours from February 14 through February 18. The temperature continued to spike to 101.2 F. daily until February 17. On February 18, 1944, the temperature rose only to 100 F. On February 19 the highest peak of temperature was 99.2 F., thereafter the temperature curve was normal. The patient continued to have a moderate amount of vaginal discharge and the sinus opening in the vagina was still present. The abdominal drainage wound had completely closed by the time the penicillin therapy was instituted. She was discharged from the hospital February 24, 1944, and thereafter was followed in the Out-Patient Department. She took her temperature several times a day at home for the following two weeks; the highest that it reached was 100 F., this only on one day about one week after her discharge. She was seen April 14, 1944, at which time she had been afebrile for approximately two months; she still had a very slight vaginal discharge. The sinus opening, while still present, was very small and a probe could be introduced only about one-fourth inch. The patient had gained weight and was still feeling fine. She was again seen on June 2, 1944. The sinus tract had completely closed and there was no vaginal discharge. She stated that she had no complaints.

SUMMARY

1. A case report is given of a vaginoperitoneal fistula with chronic peritonitis. No

report of any similar case could be found in the literature.

2. Marked response to penicillin therapy was noted.

MISCELLANEOUS

COMING MEETINGS AND CLINICS

State Medical Association of Texas. Dr. H. F. Connally, Waco, President; Dr. Holman Taylor, 1404 W. El Paso St., Fort Worth, Secretary.

American Medical Association. Dr. Herman L. Kretschmer, Chicago, President; Dr. Olin West, 535 North Dearborn Street, Chicago, Secretary.

Southern Medical Association. Dr. E. Vernon Mastin, St. Louis, Mo., President; C. P. Loranz, Empire Building, Birmingham, Ala., Secretary-Manager.

Southwest Allergy Forum. Dr. Ralph Bowen, Houston, President; Dr. George Owen, 910 North State St., Jackson, Miss., Secretary.

Texas Ophthalmological and Otolaryngological Society, San Antonio, December 7-8. Dr. M. K. McCullough, Dallas, President; Dr. E. D. Dumas, San Antonio, Secretary.

Texas Radiological Society. Dr. Palmer E. Wigby, Houston, President; Dr. Asa Seeds, Dallas, Secretary.

Texas Club of Internists. Dr. Merritt B. Whitten, Dallas, President; Dr. Julian C. Barton, 414 Navarro St., San Antonio, Secretary.

Texas Association of Obstetricians and Gynecologists, San Antonio, fall, 1945. Dr. Allen Stewart, Lubbock, President; Dr. Julius McIver, 1314 Medical Arts Building, Dallas, Secretary.

Texas Pediatric Society. Dr. Frank H. Lancaster, Houston, President; Dr. John Ashby, Dallas, Secretary.

Texas Neuropsychiatric Association. Dr. Titus Harris, Galveston, President; Dr. Fred Rogers, Dallas, Secretary.

Texas Railway and Traumatic Surgical Association. Dr. W. B. Reeves, Greenville, President; Dr. Ross Trigg, First National Bank Building, Fort Worth, Secretary.

Texas Society of Pathologists, Dallas, Jan. 27, 1946. Dr. Paul Brindley, Galveston, President; Dr. John J. Andujar, 1300 W. Cannon Ave., Fort Worth, Secretary.

Texas State Heart Association. Dr. Victor E. Schulze, San Angelo, President; Dr. Walter B. Whiting, Wichita Falls, Secretary.

Texas Dermatological Society. Dr. Lewis Pipkin, San Antonio President; Dr. Duncan O. Poth, 1230 Nix Professional Building, San Antonio, Secretary.

Texas Surgical Society, San Antonio, October. Dr. Sam Weaver, Dallas, President; Dr. Walter Stuck, 1426 Nix Professional Building, San Antonio, Secretary.

Texas Association of Medical Anesthetists. Dr. E. D. Embree, Houston, President; Dr. R. A. Miller, 1415 Nix Professional Building, San Antonio, Secretary.

Texas Society of Gastro-enterologists and Proctologists. Dr. James J. Gorman, El Paso, President; Dr. George M. Underwood, 4105 Live Oak Street, Dallas, Secretary.

Texas Society for Mental Hygiene. Dr. Charles W. Castner, Capitol Building, Austin, President; Miss Jennie S. Wilmot, University of Texas, Austin, Secretary.

Texas Orthopedic Society. Dr. E. A. Cayo, San Antonio, President; Dr. Edward Smith, Houston, Secretary.

Texas Tuberculosis Association. Dr. J. B. White, Amarillo, President; Miss Pansy Nichols, Austin, Executive Secretary.

Texas Public Health Association. Major Lewis Dodson, C. E., Eighth Service Command, A. S. F. Office, Service Command Engineer, Room 222, Dallas 2, Texas, President; Mr. Alan C. Love, City Hall, Waco, Secretary.

Texas Chapter American College of Chest Physicians. Dr. S. E. Thompson, Kerrville, President; Dr. Elliott Mendenhall, Dallas, Secretary.

Texas Hospital Association. Lawrence Payne, Baylor Hospital, Dallas, President; Miss Madelyne Sturdavant, 5709 Velasco, Dallas, Secretary.

Third, Panhandle, District Medical Society. Dr. D. D. Cross, Lubbock, President; Dr. George Powers, Amarillo, Acting Secretary.

Fourth District Medical Society, Brownwood, 1945. Dr. V. E. Schulze, San Angelo, President; Dr. J. M. Horn, Brownwood, Secretary.

Fifth and Sixth, Southwest District Society. Dr. Phil A. Bleakney, Harlingen, President; Dr. C. W. Tennison, San Antonio, Secretary.

Seventh, Austin District Society. Dr. Joe Gilbert, Austin, President; Dr. A. A. Terry, Austin, Secretary.

Eighth, Ninth and Tenth Districts Medical Society. Dr. J. T. Tadlock, Dayton, President; Dr. George W. Waldron, Medical Arts Building, Houston, Secretary.

Eleventh District Society. Dr. C. E. Willingham, Tyler, President; Dr. F. E. Felder, Palestine, Secretary.

Twelfth, Central Texas, District Society. Dr. C. M. Simpson, Temple, President; Dr. R. J. Hanks, Waco, Secretary.

Thirteenth, Northwestern, District Society. Dr. J. W. Foy, Seymour, President; Dr. Joe R. Wise, 1212 W. Lancaster, Fort Worth, Secretary.

Fourteenth District Society, Dallas. Dr. W. C. Morrow, Greenville, President.

Fifteenth, Northeast Texas, District Society. Dr. Joe D. Nichols, Atlanta, President; Dr. Henry H. Niehuss, Gladewater, Secretary.

SPEAKERS BUREAU

There is published herewith a list of speakers selected by the fifteen Councilors of the State Medical Association as qualified to make talks on the subject of socialized medicine to such lay groups as civic clubs, P. T. A. groups, American Legion Posts, Chambers of Commerce, Women's Clubs, and other representative organizations. A concise discussion of the formation of the bureau and its purpose may be found on page 228 of this number. The list of speakers, by Councilor Districts, follows:

First District

Dr. R. B. Homan, Jr., First National Bank Building, El Paso.

Dr. J. Mott Rawlings, Roberts-Banner Building, El Paso.

Dr. R. A. Roberts, Pecos.

Dr. Joe Wright, Alpine.

Second District

Dr. Marion H. Bennett, Big Spring.

Dr. Chester U. Callan, Rotan.

Dr. J. E. Hogan, Big Spring.

Dr. Robert L. Howell, Snyder.

Dr. Bruce H Johnson, Lorraine.

Dr. Harry A. Logsdon, Colorado City.

Dr. J. C. Loveless, Lamesa.

Dr. L. D. Richards, Seminole.

Dr. C. A. Rosebrough, Sweetwater.

Dr. Andrew S. Tomb, Seminole.

Third District

Dr. William L. Baugh, 1302 Main Street, Lubbock.

Dr. Thomas D. Frizzell, Quanah.

Dr. E. W. Jones, Wellington.

Dr. J. R. Lemmon, Fisk Building, Amarillo.

Dr. R. R. McDaniel, Quanah.

Dr. E. O. Nichols, Plainview.

Dr. H. E. Nicholson, Wheeler.

Dr. Allen T. Stewart, 1312 Main Street, Lubbock.

Dr. H. L. Wilder, Pampa.

Fourth District

Dr. Robert S. Alcorn, Menard.

Dr. James L. Cooper, McCamey.

Dr. G. L. Nesrsta, Ozona.

Dr. Victor E. Schulze, San Angelo.

Dr. Ben M. Shelton, Brownwood.

Dr. J. J. Stephen, Goldthwaite.

Dr. William J. Swann, Sterling City.

Dr. R. E. Windham, San Angelo.

Fifth District

Dr. George B. Cunningham, Uvalde.

Dr. Thomas M. Johnson, Del Rio.

Dr. George H. Merritt, Uvalde.

Dr. Conn L. Milburn, 505 N. Saint Mary's, San Antonio.

Dr. R. A. Miller, 1415 Nix Professional Building, San Antonio.

Dr. John C. Parsons, 1232 Nix Professional Building, San Antonio.

Dr. B. E. Pickett, Sr., Carrizo Springs.

Dr. Louis J. Stahl, Gonzales.

Dr. C. S. Venable, 1525 Nix Professional Building, San Antonio.

Sixth District

Mr. Sid Hardin, Edinburg.
Dr. Bob McDonald, Weslaco.
Dr. J. B. Webb, Donna.

Seventh District

Dr. W. M. Brook, Lampasas.
Dr. C. H. Brownlee, 1212 Norwood Building, Austin.
Dr. L. L. Edwards, San Marcos.
Dr. Joe Fleming, Elgin.
Dr. H. G. Hertel, Giddings.
Dr. J. J. Johns, Taylor.
Dr. R. B. Morrison, Norwood Building, Austin.
Dr. Nelson Schiller, 1404 Norwood Building, Austin.
Dr. J. C. Thomas, Norwood Building, Austin.
Dr. C. F. Thornhill, Norwood Building, Austin.

Eighth District

Dr. William M. Blair, Wharton.
Dr. Leslie D. Boelsche, La Grange.
Dr. P. L. Brewer, Bay City.
Dr. James C. Dobbs, Cuero.
Dr. Fulton E. Dye, Bay City.
Dr. H. C. Eckhardt, Yorktown.
Dr. R. G. Johnson, New Gulf.
Dr. R. A. Mosley, Victoria.
Dr. Allan C. Shields, Victoria.
Dr. Daniel J. Schuhmann, East Bernard.
Dr. Charles A. Shoultz, Bay City.
Dr. C. I. Shult, Columbus.
Dr. J. W. Simons, New Gulf.
Dr. Joseph R. Story, Victoria.
Dr. Jarrett E. Williams, Wharton.

Ninth District

Dr. Granville Q. Adams, Medical Arts Building, Houston.
Dr. J. Corrigan, Conroe.
Dr. J. Zell Gaston, 4828 Caroline, Houston.
Dr. Charles C. Green, 1209 Rosalie, Houston.
Dr. James Greenwood, 811 Medical Arts Building, Houston.
Dr. Alvis E. Greer, 3717 Main Street, Houston.
Dr. Titus H. Harris, John Sealy Hospital, Galveston.
Dr. Abbe A. Ledbetter, Medical Arts Building, Houston.
Dr. A. O. McCary, Freeport.
Dr. Carl A. Nau, c/o Medical School, Galveston.
Dr. O. F. Schoenvogel, Brenham.
Dr. Willis S. Wallace, John Sealy Hospital, Galveston.

Tenth District

Dr. W. W. Anderson, Kountze.
Dr. W. H. Beazley, Silsbee.
Dr. W. D. Brown, 2262 North Street, Beaumont.
Dr. Mitchell O. Gibson, Lufkin.
Dr. Lynn C. Hooker, Carthage.
Dr. F. W. Lawson, Orange.
Dr. A. R. Shearer, Mont Belvieu.
Dr. F. Henry Tucker, Nacogdoches.
Dr. J. J. McGrath, Jasper.

Eleventh District

Dr. Fred E. Felder, Palestine.
Dr. T. M. Jarmon, Tyler.
Dr. C. C. McDonald, Tyler.
Dr. J. M. Travis, Jacksonville.
Dr. Leroy Trice, Palestine.

Twelfth District

Dr. Marion M. Brown, Mexia.
Dr. J. Wilson David, Corsicana.
Dr. H. R. Dudgeon, Professional Building, Waco.
Dr. T. G. Glass, Marlin.
Dr. O. F. Gober, Scott & White Clinic, Temple.
Dr. R. K. Harlan, King's Daughters Hospital, Temple.
Dr. Paul H. Power, 607 Professional Building, Waco.
Dr. G. H. Sanders, Kerens.
Dr. J. C. Terrell, Stephenville.
Dr. B. F. Roche, Waco.

Thirteenth District

Dr. Frank C. Beall, 1212 W. Lancaster, Fort Worth.
Dr. F. S. Edwards, Knox City.
Dr. Jack Furman, 1602 Medical Arts Building, Fort Worth.
Dr. H. E. Griffin, Graham.
Dr. W. G. Harrison, 517 Hamilton Building, Wichita Falls.
Dr. F. E. Hudson, Stamford.
Dr. O. T. Kimbrough, 417 Hamilton Building, Wichita Falls.
Dr. Austin F. Leach, 1300 8th Street, Wichita Falls.
Dr. T. W. Williams, Haskell.
Dr. Grover C. Wood, Breckenridge.

Fourteenth District

Dr. Talma W. Buford, Minter via Pattonville.
Dr. J. S. Cooper, Greenville.
Dr. W. A. Lee, Denison.
Dr. Elliott Mendenhall, Medical Arts Building, Dallas.
Dr. Owen R. O'Neal, Paris.
Dr. Curtice Rosser, 710 Medical Arts Building, Dallas.
Dr. Frank Selecman, Medical Arts Building, Dallas.
Dr. John Young, 4005 St. Andrews, Dallas.

Fifteenth District

Dr. D. R. Baker, Daingerfield.
Dr. V. R. Hurst, Longview.
Dr. R. L. Johnson, Pittsburg.
Dr. E. B. McGee, New Boston.
Dr. Joe D. Nichols, Atlanta.
Dr. Charles Stewart, Texarkana.
Dr. Nowlin Watson, Clarksville.
Dr. A. J. Woods, Jefferson City.
Dr. J. L. Wright, Clarksville.

ORIENTATION COURSE IN CLINICAL ALLERGY

The School of Medicine, University of Pittsburgh, offers an Orientation Course in Clinical Allergy, under the sponsorship of The American Academy of Allergy, for five days, October 1 to 5, 1945, inclusive, at the School on Bayard Street, Pittsburgh, Pennsylvania. The fee for veterans and service men is $40.00 and for residents $10.00. Registration for evening round-table conferences may be made only by special arrangements.

Inquiries should be addressed to William S. McEllroy, M. D., Dean, School of Medicine, University of Pittsburgh, Pittsburgh 13, Pennsylvania.

MEDICAL OFFICER POINT SYSTEM FOR DISCHARGES ANNOUNCED

The Office of the Surgeon General, U. S. Army, announces, as reported by *The Journal of the American Medical Association*, a point system for the discharge of medical officers.

The August 11 issue of *The Journal* says that the separation plan of the Surgeon General, drafted after several months work, had to deal not only with numbers but also with classes of personnel.

"On the basis of detailed studies," the Surgeon General's announcement said, "it was decided that it would be best to establish two classes—one for scarce specialists, the other for non-scarce specialists and general duty officers—and to set a definite score for each, so as to keep under strict control the outflow of scarce specialists."

The list of scarce specialists was kept to a mini-

mum, the announcement said, after a review of worldwide requirements and availabilities.

To deal with the separation problem for medical officers, the Surgeon General established a representative Separations Board. It developed "a series of objective criteria, which would insure the continuation of high medical standards during the Pacific war and, at the same time, provide an equitable basis for the separation of surplus officers." The Deputy Surgeon General was designated Chairman of the Separations Board, and representatives of the three major forces—Army Air Forces, Army Ground Forces and Army Service Forces—were made members of the Board.

The Board decided to establish definite criteria for separation subject "to the limits of military necessity which governs all discharge policy." It stressed the fact, however, that "these criteria create no vested right in any officer to discharge, but constitute the goal to be sought," and added: "Such

TABLE 1.—*Criteria for Separation*

Corps	Age	A. S. R.
Medical Corps*	50 or over	100 or over
Dental Corps	45 or over	100 or over
Medical Administrative Corps	45 or over	90 or over
Sanitary Corps	45 or over	90 or over
Veterinary Corps	50 or over	110 or over
Army Nurse Corps†	40 or over	65 or over
Physical Therapists Corps†	50 or over	65 or over
Medical Dietitians Corps†	50 or over	65 or over

*Scarce categories, A. S. R. 120.
†The following additional provisions cover separations: dependent children under 14; married to demobilized allied personnel.

necessity may arise from the possible need for a relatively few officers with irreplaceable experience whose usefulness is so great as to transcend individual consideration."

The criteria for separation from service follows:

1. Medical Corps officers returned by a theater or declared surplus by a major force (except those with primary military occupational specialties listed in paragraph below) are eligible for release from active duty if their Adjusted Service Rating is 100 or above.

2. Medical Corps officers in certain scarce military occupational specialties are eligible for release from active military duty if they have an Adjusted Service Rating of 120 or more: Gastroenterology, Ophthalmology and Otolaryngology, Cardiology, Dermatology, Allergies, Anesthesia, Neuropsychiatry, Neurosurgery, Thoracic Surgery, Plastic Surgery, Orthopedic Surgery, Clinical Laboratory.

3. Medical Corps officers over 50 years of age, irrespective of their specialty classification, are eligible for relief from active military duty if they are returned to the United States by a theater or declared surplus by a major force.

4. No Medical Corps officer with an efficiency index of 41 or more who desires to remain on active military duty will be relieved, irrespective of age, military occupational specialty or Adjusted Service Rating.

The Board explained that paragraph four is "in keeping with the spirit of readjustment regulations which provide that individuals who desire to remain on active duty will be given every consideration."

Continuing, the announcement said:

"Because of the fact that the general hospitals in the United States are now at peak and because the Surgeon General desires to send replacements to the Pacific as quickly as possible, the age provision is not being put into effect at the moment for personnel in the Army Service Forces, and *no Medical Corps officers in the non-scarce category are being released who has less than 110 points (except those who return from overseas since V-E Day).* However, it is hoped that when more of the surplus personnel is returned from the European and Mediterranean theaters, this temporary expedient can be lifted.

"Subject to the general qualifications stated, Table 1, summarizes the criteria for separation established for all Medical Department Corps.

"As in the case of Medical Corps officers, the Army Service Forces, for the time being, have not placed into effect the age provision for Dental Corps officers, and they are operating under a score of 110. But it is hoped that this exception can be removed later."

"To implement the restaffing of units scheduled for the Pacific coming through the United States," the announcement said, "a complete census was undertaken of all personnel stationed in the United States. On the basis of this census and in light of experience to date, criteria were established for withdrawing personnel from units passing through the United States and for assigning personnel now in the United States to the units scheduled for the Pacific.

"These are only general rules and are subject to exception in any case due to military necessity, and to change if subsequent developments should make such action necessary. They are not to be understood as creating any rights in an officer to continue on duty in this country if military needs now or later should require his assignment to other duty. Subject to these qualifications, the plan for withdrawal of officers from units and for new assignments is shown in Table 2.

"Because there is nothing in this plan of medical redeployment which takes precedence over considerations of military necessity, it will not be possible to apply the withdrawal principle to Commanding Officers and Executive Officers of hospital units or to certain Medical Department personnel attached to divisions because adequate replacements cannot be found and trained within the available time."

The text of the official announcement published in *The Journal* said that "during recent weeks every effort has been made to speed the return of surplus personnel from the European and Mediterranean theaters so that a maximum number of Medical Department officers, especially Medical Corps officers, can be returned to the United States for reassignment and separation.

Commenting editorially on the hasty action taken by various medical societies and organizations regarding separation of medical officers, *The Journal* said:

"The policy presented in this issue of *The Journal* is one on which the officials of the United States

TABLE 2.—*Plan for Withdrawal and Assignment of Officers*

CORPS	Age		A. S. R.		Overseas Service V-E Day (Months)	
	Withdrawals	Assignment	Withdrawal	Assignment	With-drawal	Assign-ment
Medical Corps	45 or over	44 or under	75 or over	74 or under	12	0
Dental Corps	40 or over	39 or under	50 or over	49 or under	6	0
Medical Administrative Corps	40 or over	39 or under	50 or over	49 or under	6	0
Sanitary Corps	40 or over	39 or under	50 or over	49 or under	6	0
Veterinary Corps	40 or over	39 or under	50 or over	49 or under	6	0
Army Nurse Corps	40 or over	39 or under	30 or over	29 or under	6	0
Physical Therapists Corps	40 or over	39 or under	30 or over	29 or under	6	0
Medical Department Dietitians	40 or over	39 or under	30 or over	29 or under	6	0

Army and of the Army Medical Department have been working for some time. . . . The organization known as the Association of American Physicians and Surgeons, Inc., according to the press, has sent a resolution to numerous officials of the government. This resolution lists a number of rumors, most of which are without the slightest foundation in fact. The officials of the Association of American Physicians and Surgeons could have found out how completely unwarranted these statements were before giving them publication and thus promoting dissatisfaction and disintegration of morale without the accomplishment of any conceivable worthwhile objective."

PERMANENT MEDICAL CENTERS FOR PHYSICAL MEDICINE

The Baruch Committee on Physical Medicine, founded in 1944 by Bernard M. Baruch with an endowment of $1,190,000, has sent to institutions and consultants over the country a blueprint of a war memorial proposed for medical centers to be dedicated to the restoration of war veterans. The blueprint proposes only basic essentials and is subject to variation to meet special needs and limitations of large or small zones of population. The print shows plans for buildings, equipment and staff for such a center and plots the courses of treatment indicated for the restoration of injured fighting men or war workers to useful activities. It is urged that such memorials will be more fitting than conventional monuments set up in public parks and squares.

As time goes on, it is proposed that civilian patients, especially those injured in modern industry, may be sent to the centers by their personal physicians and surgeons, the cost of their care and treatment helping to meet expense and overhead. The cost of treatment for military patients will be met by the government, especially in the beginning. It is planned that ultimately such centers as proposed by the Committee should be self-sustaining.

It is hoped that with the establishment of the proposed centers tragic conditions following World War I may be averted—the segregation of disabled fighting men into large veterans' hospitals remote from their homes where many may pass their days in a state of mental apathy, disillusion, and, in many cases, bitter resentment.

The original endowment of the Baruch Committee, which has for its purpose the encouragement and development of physical medicine, is being applied to the establishment of departments, teaching, research and experimentation; and, also, through supported fellowships, to education in physical medicine's advanced phases and modern requirements.

Medical schools of ten universities and colleges are now participating in the original gift of $1,190,000 by Mr. Baruch. Five fellowships, each carrying an annual stipend, have already been granted from a fellowship fund of $100,000 for the encouragement of medical students at the various institutions who may plan to make physical medicine their specialty and devote their professional careers to it. The grants to the different institutions have been as follows: $400,000 to the College of Physicians and Surgeons of Columbia University; $250,000 to the College of Medicine of New York University; $250,000 to the Medical College of Virginia from which Dr. Simon Baruch, Mr. Baruch's father, received his medical degree in 1862; $50,000 to the Massachusetts Institute of Technology; $40,000 to the University of Minnesota; $30,000 to the University of Southern California; $25,000 to Harvard University; $15,000 to the University of Iowa; $10,000 to Washington University of St. Louis, Missouri; $15,000 to the University of Illinois, and $5,000 to Marquette University.

The Committee is working in the closest coöperation with the armed services in the interest of veterans. Announcement of the availability of Baruch fellowships has been sent to 3,500 medical officers released from military services during the year.

The Committee is national in personnel as well as in scope. Texas is represented on the committee by Dr. Chauncey D. Leake, vice-president and dean of the University of Texas School of Medicine, Galveston.

MALARIA IN GREECE

Because of the critical increase of malaria in Greece the United Nations Relief and Rehabilitation Administration is sending ten specially equipped planes to that country to be used in spraying mosquito breeding areas with DDT. It is reported that there are some areas in the country where 100 per cent of the population is infected with malaria fever. Data now available indicate that 40 to 50 per cent of the country will be infected during the season which lasts from April through October. The present number of victims approaches the three million mark. Prior to the war, the estimated average number of cases in Greece was approximately 50,000 per year.

In conducting the anti-malaria campaign the country has been divided into ten regions. An UNRRA plane will be assigned to each region. In spraying the swamps, the planes will fly only five to ten feet above the surface and will cover 17 acres per minute. Each plane will carry a load of 33 gallons of DDT solution. The solution developed for the purpose is 20 per cent DDT mixed with a naphthalin solvent, and will kill both adult mosquitos and larvae. It is turned into spray by a special generator and discharged through the motor exhaust. Six thousand five hundred gallons of solution will be shipped to Greece with the first four planes; an amount sufficient to cover approximately 100,000 acres of mosquito-breeding swamp land. This amount is in addition to the 40,000 pounds of 100 per cent DDT and the 120,000 pounds of 10 per cent DDT which has already been shipped.

In addition to the planes and other equipment necessary for the treatment of malaria swamps, UNRRA will aid Greek health officials in the work of spraying 750,000 homes with DDT. Up to the present time, UNRRA has shipped to Greece 28,000,000 tablets of atabrine and 150 kilograms of quinine. These drugs are sufficient to provide treatment for approximately 2,500,000 malaria victims.

VENEREAL DISEASE CONTROL

The Division of Venereal Diseases, U. S. Public Health Service, announces that a total of $8,756,876 has been alloted by the Venereal Disease Division of the U. S. Public Health Service to the States and Territories for venereal disease control for the fiscal year ending June 30, 1946. Of the total, $4,378,438 is to be matched by the States. This will assure a combined Federal and State venereal disease control budget of more than 13 million dollars for the year. The allotment of Federal funds represents a national expenditure of 7 cents per capita for the control of venereal disease. Allotments were made to the individual States on the basis of population, financial need, and the magnitude of the general venereal disease problem in each State. The allotment to Texas is $668,880, or 11 cents per capita.

The Congress has appropriated 5 million dollars to finance the administration of the rapid treatment center program for intensive therapy of venereal diseases, which has been assumed by the Public Health Service. Evolution of the program from a war facility to a general treatment facility for all patients subject to public care indicated that the program now might be administered as a responsibility

of the Public Health Service in the nation-wide venereal disease control program more properly than as a war community service financed from the Lanham Act funds.

The Public Health Service, therefore, was authorized to submit to the Bureau of the Budget estimates of funds necessary to continue the rapid treatment center program during the 1946 fiscal year. Congress, on July 3, appropriated 5 million dollars to be used for subsidizing the maintenance and operation of existing Federal and State centers, the payment of fees to hospitals for providing in-patient care, and the establishment of new centers as required.

Forty-four individual centers, in thirty-five States, including ten Federally operated centers in ten States, are contemplated in contract proposals received and reviewed to date. In addition, proposals for contracts with hospitals to provide beds for the intensive treatment of venereal disease patients have been received from six States. A total of about 300 hospitals would be eligible to receive venereal disease patients under these proposals.

EVACUATION OF MILITARY PATIENTS FROM EUROPE

More than 100,000 sick and wounded soldiers have been returned from Europe since V-E Day, it was disclosed today by Brigadier General Raymond W. Bliss, Assistant Surgeon General of the Army.

The Army set for itself a goal of returning by plane and ship all transportable wounded from Europe within ninety days after V-E Day and the record job was completed before the August 8th deadline. In the last war thousands of wounded awaited transportation from Europe for a year.

The number of non-transportable cases in comparatively small, General Bliss pointed out, and these will be transported to the U. S. as they are able to be moved.

A streamlined policy of processing wounded returnees has been in effect and the patient is permitted to visit home with an absolute minimum of delay. The majority of the men have arrived at New York City or Charleston, S. C. In a matter of hours within their arrival they are assigned a bed at a nearby hospital, such as Halloran at New York or Stark General at Charleston.

Surgeon General Norman T. Kirk has directed that the patient be sent from these ports of debarkation hospitals to a hospital where he can get best medical and surgical care according to his needs. Amputation cases, for example, are sent to any of the seven general hospitals which specialize in this field, and deaf patients are sent to Borden in Oklahoma, Deshon in Pennsylvania, or Hoff in California.

At the time of Pearl Harbor there were approximately 15,000 beds in all Army general hospitals in this country. That capacity is now 215,000 and does not include the vast network of Army station and regional hospitals which provide for routine needs of soldiers stationed in this country.—S. G. O. Notes, July 31, 1945.

FRONT LINE PSYCHIATRY EFFECTIVE

Approximately 90 per cent of combat exhaustion cases are returned to duty largely as a result of prompt detection of symptoms and skilled handling of the patient, it was announced by the commission of outstanding civilian psychiatrists which recently completed an 11-week survey of psychiatric conditions in the European theater of operations.

Members of the commission expressed their "greatest admiration for the courage, ingenuity and accomplishments" of their colleagues overseas working sometimes under fire and in the face of other serious handicaps and hazards.

Combat exhaustion cases, known as shell shock in the last war, and sometimes referred to as combat fatigue or operational fatigue, are being treated more successfully in this war because of the high quality of personnel in the field and better methods and techniques. Of the greatest importance is the fact that our psychiatrists are doing some of their most effective work right up near the front at the clearing stations.

Dr. Karl Menninger, a member of the commission and Director, Menninger Clinic, Topeka, Kansas, pointed out that alert and understanding sergeants and lieutenants in the front lines are anticipating cases of combat exhaustion. Symptoms are increasing irritability, lack of interest in letters from home and in comrades, and general lassitude and moroseness. A man who has reached this stage but who has not yet come to the breaking point can usually be brought back to normal by prompt evacuation to rest camps for relief from stress of battle.

Other findings were: There is a direct ratio between the number of exhaustion cases and the intensity of combat; combat exhaustion emphatically does not mean a soldier is "yellow"; every man has his breaking point; a martyr situation more quickly induces combat exhaustion.

Other members of the commission are: Dr. John C. Whitehorn, Chief Psychiatrist, Johns Hopkins Hospital, and Professor of Psychiatry, Johns Hopkins University; Dr. John Romano, Professor of Psychiatry, University of Cincinnati, College of Medicine; Dr. Lawrence S. Kubie, Associate in Neurology, College of Physicians and Surgeons, New York; and Dr. Leo H. Bartemeier, Professor of Psychiatry, Wayne University, Detroit, Michigan.—S. G. O. Notes, July 31, 1945.

MAJOR GENERAL LULL KEYNOTES "MEDICS" 170TH ANNIVERSARY

The Army Medical Department from the four corners of the earth celebrated its 170th anniversary July 27, as press and radio services of this country joined hands to pay tribute to the achievements of "the medics."

Keynoting the festivities, Deputy Surgeon General George F. Lull in an address from Valley Forge called attention to the fact that today's Medical Department, more than one-half million strong, is gearing itself to new high standards in the care of America's sick and wounded at home and abroad.

"We are justifiably proud of our World War II record of returning nearly ninety-seven of every hundred of our disabled soldiers to duty," General Lull said. Speaking from the birthplace of the Medical Department, General Lull told how the Continental Congress acted upon General George Washington's request in 1775 that a Medical Department be organized because "the lives and health of both officers and men so much depend on a due regulation of this department."

Predicting even greater advances in the future, the Deputy Surgeon General pointed out that the peak load of Medical Department activity would not be reached until this fall.

Leaders in all sections of the country publicly praised the medics, and appropriate programs were held at hospitals and medical installations.—S. G. O. Notes, July 31, 1945.

The rheumatic fever rate will surely decrease substantially and effectively if a community can manage to provide better socio-economic conditions for its citizens through improved housing and an opportunity for more healthful outdoor activities; less crowding and an intelligent consciousness of good nutrition; good public health control of communicable

disease, particularly streptococcal respiratory colds and sore throats, with facilities for careful examination of children suspected of having rheumatic fever. This has been accomplished to a great degree in the case of tuberculosis control, and a more thorough application of these principles will reduce further the tuberculosis rate as well as the rheumatic fever rate. —Hugh McCulloch, M. D., Minn. Med., Dec. 1944.

LIBRARY NOTES

The package library consists of collections of reprints and other periodical material on various subjects, prepared for lending to members of the Association. Requests for packages should be addressed "Library, State Medical Association of Texas, 1404 W. El Paso Street, Fort Worth 3, Texas." Twenty-five cents in stamps should be enclosed with the request to cover postage and part of the expense of collecting the material. Only one package may be borrowed at a time, and packages are allowed to remain in the hands of the borrower for 14 days.

Package Service

Packages were mailed from the Library of the State Medical Association to the following during August:

Dr. Paul K. Conner, Jacksboro—*Varicose Veins, therapy* (16 articles).

Dr. W. L. Jackson, Ranger—*Edema, etiology and pathogenesis* (9 articles).

Ashburn General Hospital Library, McKinney—(12 journals).

Dr. J. D. Hall, Wichita Falls—*Bladder, diverticula* (17 articles).

Dr. C. R. Finnegan, Dallas—*Menstruation, disorders* (12 articles).

Lt. Col. Albert M. Schwartz, Waco—(2 books).

Dr. J. J. Hanna, Glen Rose—*Pneumonia* (11 articles).

Dr. Robert H. McCarty, Lubbock—*Calcium, metabolism* (14 articles).

Dr. W. N. Powell, Temple—*Blood, thiocyanate* (4 articles).

Library, AAF Regional Hospital, San Antonio—(3 journals).

Dr. Dee R. Foster, Itasca—*Amyloidosis, diagnosis* (6 articles).

Captain J. J. Hopkins, Waco—(5 journals).

Dr. Chas. B. Reed, Clarksville—*Pregnancy, abdominal* (12 articles).

Drs. Camp & Cole, Pecos—*Thrombophlebitis* (7 articles).

Dr. M. L. Stubblefield, Baird—(1 book).

Dr. G. Graham, Newton—*Cancer, tuberculosis and cancer* (6 articles).

Major E. E. Grossman, Camp Maxey—*Erythema, multiforme* (6 articles).

Dr. York Lancaster, San Marcos—*Blood Pressure, high, therapy* (7 articles).

Major S. H. Nickerson, Camp Maxey—(1 journal).

Dr. P. A. Woodward, Bryan—*Blood Sugar, hypoglycemia* (11 articles).

Dr. A. J. Streit, Amarillo—*Lacrimal Organs* (16 articles).

Major O. Theodore Roberg, Camp Maxey—*Cecum, ulcers* (6 articles).

Dr. G. Turner Moller, Corpus Christi—*Bladder, inflammation* (15 articles).

Dr. W. H. Beazley, Silsbee—*Polycythemia* (23 articles).

Accessions

Philadelphia, W. B. Saunders Company—Cantarow & Trumper: Clinical Biochemistry, ed. 3; Felsen: Bacillary Dysentery, Colitis and Enteritis; Bulbulian: Facial Prosthesis.

Indianapolis, A. V. Grindel—Noble: The Treatment of Peritonitis and Its Aftermath.

Summary

Reprints received, 1320. Local users, 25.
Journals received, 194. Borrowers by mail, 25.
Items consulted, 83. Packages mailed, 29.
Items taken out, 154. Items mailed, 223
Total items consulted and loaned, 460.

MOTION PICTURE LENDING LIBRARY

Motion picture films on medical subjects, 16 mm., both silent and sound, some in color, and suitable for either medical or lay audiences, are available for loan to county medical societies, hospital staffs, or individual physicians, on request. Borrowers will be required to pay only the cost of shipment of the films, by express, with insurance, and for any damage to films while in the hands of the borrower.

Requests for films should be addressed to "Motion Picture Lending Library, State Medical Association of Texas, 1404 West El Paso Street, Fort Worth 3, Texas." A list of available films, with descriptions, will be furnished on request.

The following motion picture films were loaned by the Motion Picture Lending Library of the State Medical Association during August:

Choose to Live (Available through the courtesy of the United States Public Health Service and the American Society for the Control of Cancer)—Nurse's Aides, Fort Worth area, Fort Worth.

HOSPITALS NEEDING INTERNS AND RESIDENTS

El Paso City County Hospital, El Paso. Capacity 192 beds. George W. Cook, Col., U. S. A. Ret., Superintendent (3 interns Oct. 1, 1945).

Methodist Hospital, Dallas. Capacity 206 beds. C. W. Sensenbach, M. D., Medical Director; (4 interns now).

Nix Hospital, San Antonio. Capacity 145; admissions 5,564. Ellen Louise Brient, R. N., Superintendent (1 intern June 1).

St. Paul Hospital, Dallas. Capacity 270 beds. C. W. Sensenbach, M. D., Medical Director (1 intern now).

Stephenville Hospital, Stephenville. Capacity, 65 beds. Admissions 1,775. J. C. Terrell, M. D., Medical Director (1 resident now, $300 per month).

Wichita General Hospital, Wichita Falls, capacity, 135; admissions 4,303. Mrs. Margaret Hales Rose, Superintendent (2 residents needed at once. Salary $175.00 and maintenance).

NEWS

The E. M. I. C. Program.—The Army has spent $7,000,000 on babies since the war began, Major Thedore M. Gribble of the Eight Service Command told members of the Dallas Retail Credit Men's Association August 9, at the Hotel Adolphus. By the time the war ends, the Army expects to have sponsored financially more than 1,500,000 births, he said, under the maternity and infant care program for mothers and infants of men in the armed forces. —*Dallas News.*

Hospital for Henrietta and Clay County.—The Henrietta *Independent* reports that the Henrietta and Clay County Chamber of Commerce recently announced a drive for funds to build a hospital which will be dedicated to members of the armed forces of Clay County who lost their lives in World War II. The name of the proposed hospital will be Clay County Memorial Hospital. The hospital will be incorporated, and it is estimated that $40,000 will be needed for construction of the building. The par value of stock is $100 per share, and the funds raised will be placed in escrow in the First National Bank of Henrietta until construction begins. Co-chairmen and committee members have been named.

Southwestern Medical College News.—A Department of Experimental Medicine has been established in Southwestern Medical College by the board of trustees of Southwestern Medical Foundation, informs the Dallas *News*. Dr. Arthur Grollman, formerly professor of experimental medicine has been named professor of medicine and will be chairman of the Department of Experimental Medicine. Dr. Grollman, a graduate of Johns Hopkins University, taught at that institution until 1941, when he assumed the professorship of research medicine at the Bowman Gray School of Medicine, Winston-Salem, N. C., before coming to Southwestern Medical College.

Dr. S. Edward Sulkin has been promoted from associate professor of bacteriology and immunology to professor and acting chairman of that department.

Dr. G. T. Caldwell, professor of pathology, has been granted a leave of absence of one year.

Medical degrees were awarded forty-eight members of the third graduating class of Southwestern Medical College September 3, at McFarlin Memorial Auditorium, reports the Dallas *News*. This year's graduates comprise the last class which received part of its training at Baylor University College of Medicine before the latter moved to Houston. Southwestern Medical College has graduated 166 doctors of medicine in the two years of its existence. Dr. E. H. Cary, Dallas, president of Southwestern Medical Foundation, asserts that the objective of the college is to stress quality instead of quantity in turning out graduates; that future enrollment will largely depend upon how adequately the college is financed, but an institution of high standards will always be maintained.

Thirty-four of this year's graduates received commissions as first lieutenants in the medical corps of the Army and five were given commissions in the Navy. Of the nine civilian members of the class there was one girl.

Medical Art Degrees will be conferred by Southwestern Medical College, according to an announcement by Dr. E. H. Cary, president of the Southwestern Medical Foundation, advises the Dallas *News*. The purpose of the new department is to produce teachers qualified to head new medical art departments elsewhere. Three years premedical work is a prerequisite to study in the department, and may be obtained at any accredited school.

Southern Methodist University, Dallas, is offering a Bachelor of Arts degree in medical illustration after a student finishes two additional years of specialization at Southwestern Medical College. A third year of art studied at the college will qualify the student for a masters degree in medical illustration.

Lewis Waters, professor of art as applied to medicine, will head the department. Waters has pioneered in medical education for twenty years. While art has been used in illustrating medical text books from almost the beginning of the profession of medicine, the combining of photography, art, sound recording, display and plastic prosthesis, in addition to three years premedical college work is entirely new and originated at Southwestern Medical College, according to Mr. Waters, who asserted that the department is the first and only separate medical art and visual educational department connected with an accredited medical school.

Baylor Medical School Commencement Exercises.—The degree of doctor of medicine was conferred upon thirty-nine graduates of Baylor University College of Medicine, July 16, in commencement exercises at the First Baptist Church, Houston. Baccalaureate exercises were held July 15.

Dr. E. N. Jones, president of the Texas College of Arts and Industries, Kingsville, delivered the commencement address and Pat M. Neff, Baylor University president, presided and conferred degrees. Dr. Jones, in his commencement address, asserted that "Socialized medicine is not the answer to mass medical service." He expressed the opinion that "socialized medicine would result in doctors becoming politicians rather than medical practitioners." He spoke in favor of group medicine in which doctors work together, yet each maintains his own independence.

Nineteen students received commissions as first lieutenants in the Army medical corps and sixteen were commissioned lieutenants, junior grade, in the Navy.

The honorary degree of doctor of laws was conferred upon Col. Henry Morgan Winans, M. C., A. U. S., faculty member of Baylor University College of Medicine from 1920 to 1942. Colonel Winans organized the Baylor Hospital Unit in 1942, which served during the African and Italian campaigns. He is now chief of Medical Service at Brooke General Hospital, San Antonio.

U. of T. Medical News.—Dr. Chauncey D. Leake, vice-president and dean, University of Texas, School of Medicine, points out that although the University of Texas has been placed on probation by the Southern Association of Colleges and Secondary schools, the School of Medicine at Galveston is not affected, reports the Galveston *News*. Dr. Leake states that the medical college is under the jurisdiction of the Council on Medical Education and Hospitals of the American Medical Association and other accrediting medical agencies.

State Senator William E. Stone, Galveston, addressing members of the Galveston Kiwanis Club, July 24, asserted that Galveston must make itself more desirable as the site of the University of Texas School of Medicine, in discussing the recent controversy over moving the school to some other city. Senator Stone urged that private capital build apartment houses near the medical school and open a community center.

The Board of Regents of the University of Texas, meeting at Austin, July 14, approved the budget for the school of medicine, the Galveston *Tribune* quotes Dr. Chauncey D. Leake, dean. Dr. Leake stated that preliminary arrangements between the Board of Regents and the Sealy and Smith Foundation for the construction of a new two million dollar general hospital, a gift of the Foundation, and an addition to the Rebecca Sealy residence were also approved by the Board.

A laboratory of experimental medicine has been established at the college, with Dr. Raymond L. Gregory in charge.

A department of nursing education has been created to provide special training for nursing teachers, which will be conducted in cooperation with the school of education in the main university at Austin.

Dr. D. Bailey Calvin, associate dean and registrar, has been named dean of students and curricular affairs.

Budgetary provisions have been made for the opening and operation of the Galveston State Psychopathic Hospital, and it is hoped that equipment and furniture, together with personnel, can be obtained so that it may be opened within the near future. Dr. Jack Ewalt, professor of psychiatry, has been appointed medical director.

Dr. D. Bailey Calvin, dean of students, announces that the next entering class of the school of medicine will matriculate September 13, according to the Galveston *News*. The class will be composed of approximately twenty-eight members of the Navy V-12 training program; twenty-seven in the Army specialized training program, and approximately forty-five civilian students. This is the first class being matriculated under the plan approved for acceptance

and matriculation of one entering class each twelve months. The accelerated program will be continued in which the medical course will be completed within thirty-six months.

Dr. Calvin announced that the next class will be admitted on or about October 1, 1946, and that applications to this class are now being received from premedic students. Only those who will have completed ninety semester hours by October 1, 1946, are eligible.

Discharged veterans who are accepted for admission to the medical school will receive benefits under part 7 and 8 of the GI bill of rights, which will include payments of all tuition fees, laboratory fees, equipment and health fees, plus fifty dollars a month for single persons and seventy-five dollars monthly for married persons.

The Central Texas Health Unit Annual Report for the fiscal year ending June 30, 1945, gives a detailed account of health work in the counties of Williamson, Bell, Coryell and Lampasas, publishes the Belton *Journal*. Immunizations given by the unit were as follows: smallpox, 4,899; typhoid, 14,461; diphtheria, 4,102; tuberculin (skin tests), 3,130; Schick tests, 1,491; pertussia, 1,000.

Other services rendered by the unit included clinic work, treatment and home visits in venereal disease control; skin tests, x-ray studies; home visits and aid to private physicians and the State Hospital in cases of tuberculosis; special services in connection with maternity and infant care; pre-school and school health service; adult health service; and the crippled children's service.

The sanitary services included collection of water and milk samples for laboratory analysis and regular inspections of trailer camps, tourist camps, swimming pools, schools (urban and rural), all food stores, restaurants, lunch counters, taverns, itinerant cafes, bakery shops, meat markets, candy stores, dairy farms, ice plants and slaughter houses.

Sanitarians supervise the construction of pit privies, septic tanks and dairy barns, rodent control campaigns in the area, treating buildings for rat eradication and making and distributing rat baits. Assistance is given in the control of mosquito breeding places. Public lectures, classes and motion pictures are given by the sanitarians to all interested groups. Nuisance and complaint investigations are made and instructions given for correction.

Total inspections listed show food stores, 1,301; tourist courts, 258; schools, 182; eating and drinking establishments, 4,389; dairy inspections, 358, and miscellaneous inspections, 1,156.

The total number of venereal disease treatments given was 8,375, and 3,369 tests and specimens were collected.

The Unit was operated at an expenditure of $25,548.52 local funds and $27,351.48 state funds. Dr. J. Frank Clark is director of the unit, with city sanitarians in the towns of Killeen, Gatesville, Lampasas, Temple and Taylor. Each of the four counties served maintain office personnel, investigators and public health nurses.

Ophthalmologic Examination Postponed.—The American Board of Ophthalmology announces that due to transportation difficulties the examination of the Board, originally scheduled for Chicago, October, 1945, has been postponed to January 18-22, 1946.

The 1946 examination will be held in Chicago on the dates stated; in Los Angeles, from January 28 through February 1; in New York in May or June, and in Chicago again in October, 1946.

Military Personals

Colonel Ellis McFerrin Altfather, MC, Weatherford, was recently promoted from Lieutenant Colonel, and *Lieut. Col. Leon Donald Beddow*, MC, Dallas, and *Lieut. Col. Irving Richard Lyman*, MC, Fort Worth, were recently promoted from the rank of Major, informs the Office of the Surgeon General.

Dr. Charles A. Dwyer Jr., Houston, who has returned after being held a prisoner for three years by the Japanese in Manila's Bilibid Prison, was recently named psychiatrist for Harris County, succeeding the late Dr. J. B. York, states the Houston *Post*. Dr. Dwyer was serving as a lieutenant in a marine hospital in Manila when taken prisoner in early 1942.

Major Gordon Turrentine, MC, and *Captain Dan Scott*, MC, Houston, who have recently returned to civilian life from overseas duty were feted by fellow members of the Houston Optimists at the club's weekly luncheon August 2, states the Houston *Press*. Both Captain Scott and Major Turrentine gave short talks regarding their military experiences.

Major John B. Peyton, MC, Dallas, was the first Dallas County doctor to be discharged from the Army on points, after four and one-half years of military service that included amphibious assault landings at Sicily and Normandy, advises the Dallas *News*. Major Peyton had been overseas three years.

Lieutenant Howard Stackhouse, MC, USNR, was recently awarded the Bronze Star and cited for outstanding services rendered in the Marine division hospital on Iwo Jima at times under fire and infiltrated by Japanese, reports the Houston *Chronicle*. Lieutenant Stackhouse had practiced eight years at Houston before entering service.

Personals

Dr. A. R. Shearer, Mont Belvieu, raises Canadian wild geese as a hobby, according to the Houston *Chronicle*. Dr. Shearer has successfully raised eight out of nine hatched in four years. He has been actively interested in bird life for more than fifty years and has been a member of the American Ornithological Union, The Wilson Ornithological Club of Sioux City, Iowa, the Cooper Ornithological Club of California and the American Association for Advancement of Science. His interests in natural history studies for fifty years have caused him to visit every foot of the bay shores of the Trinity and Galveston bays and the wide expanse of the marsh and river bottom lands adjacent to the mouth of the Trinity River.

Dr. T. A. Taylor, Lufkin, was recently honored with a dinner on the occasion of his 70th birthday, states the Lufkin *News*. Dr. Taylor has been practicing in Angelina County for forty years and is still active in internal medicine. He is especially interested in research work in oxygen therapy and oxygen equipment, having invented an oxygen tent known as the "Oxygenaire". He is the author of numerous articles on oxygen therapy published in the *Journal, The Journal of the American Medical Association* and other scientific publications.

Dr. L. G. Ballard, Granbury, has returned from three weeks postgraduate study in surgery in Kansas City, advised the Granbury *News Tablet*.

Dr. Warren Andrews, associate histology professor at Southwestern Medical College, Dallas, has been invited to do research work for four months at the University of Montevideo, Uruguay, according to the Park City *News*. The cultural cooperation division of the United States Department of State has offered to finance Dr. Andrews' trip, authorized by the Uruguayan Minister of Public Health. The invitation was extended to Dr. Andrews by Professor Dr. Julio Maria Sosa, director of the laboratory for histological research in the University of Montevideo, in recognition of Dr. Andrews' interest and research in geriatrics.

Dr. Henry A. Petersen, Houston, is taking postgraduate work in Boston, informs the Houston *Press*.

Dr. C. R. Cockrell, Snyder, was recently operated on in a Fort Worth hospital, informs the Baird *Star*. Dr. Cockrell is reported to be convalescing satisfactorily.

Dr. J. Allen Kyle, Houston, has accepted chairmanship of the physicians division of the Harris County War Chest fall campaign, advises the Houston *Chronicle*.

Dr. C. A. Shaw, formerly of Big Spring, recently resigned as superintendent of the Big Spring State Hospital and has accepted the position of county psychiatrist of Dallas County and director of the psychopathic division of the Parkland Hospital, Dallas, announces the Big Spring *Herald*.

Walter D. Adams, Forney, was recently awarded a plaque by the *American Druggist* for outstanding community service. The award has previously been presented to only thirty druggists in the United States, which number includes two other Texas druggists. It is pointed out that Walter Adams has conducted an ethical pharmacy in Forney for fifty-two years; that he has served as mayor of his own town; that he is at present president of the Forney State Bank and has served in many other responsible positions. He is a past president of the American Pharmaceutical Association. He has served as both secretary and president of the Texas Pharmaceutical Association. For many years he edited the official journal of the Texas Pharmaceutical Association.

MARRIAGE

Dr. Barrett Miles Thompson of Irving, was married July 8 to Miss Dorothy Edith Massey, in Irving. Mrs. Thompson is a graduate nurse of the Methodist Hospital, Dallas.

SOCIETY NEWS

Brazoria County Society

May 31, 1945

(Reported by W. C. Holt, President)

Present Day Surgical Trends and the Treatment of Hypertension—S. R. Snodgrass, Galveston.

Brazoria County Medical Society met May 31 at the Tarpon Inn, Freeport. S. R. Snodgrass of Galveston, guest speaker, gave an informative discussion of present day surgical trends and the treatment of hypertension, illustrating his talk with lantern slides.

The Society voted unanimously to refrain from elective tonsillectomies during the summer because of the prevailing poliomyelitis epidemic.

July 31, 1945

(Reported by A. O. McCary, Secretary)

Brazoria County Medical Society held a called session July 31, at the Dow Magnesium Corporation Hospital, Velasco, with ten members present.

A. O. McCary, Freeport, was elected secretary to fill the vacancy caused by the death of Dr. Brooks Stafford.

The society adopted resolutions in favor of doing everything possible to promote the immunization of school children.

A resolution that tonsillectomies be resumed in the area, when necessary, was adopted.

George D. Reeves, Freeport, was nominated for the position of chairman of the Procurement and Assignment Advisory Committee for Brazoria County.

El Paso County Society

May 8, 1945

(Reported by John D. Martin, Secretary)

Present Status of the Treatment of Compound Fractures—Lt. Col. W. A. Bishop, M. C., Lt. Col. John H. Gilmore, M. C., and Capt. W. C. Basom, M. C., Wm. Beaumont General Hospital, El Paso.

El Paso County Medical Society met May 8, in the club rooms of the Hotel Cortez, with Sam R. King, president, presiding. The scientific program as given above was carried out. Captain Basom illustrated the presentation given above with an illuminating series of roentgenograms and lantern slides.

E. G. Causey, who has recently returned to practice in El Paso after three years service in the Army, was a welcome attendant on the meeting.

Falls County Society

July 9, 1945

Round Table Discussion of Poliomyelitis.

Falls County Medical Society met July 9, at the Buie Clinic, Marlin.

S. S. Munger, program chairman, presented a round table discussion of poliomyelitis, which was participated in by all members of the Society present.

Points brought out were that the disease is caused by a virus, conveyed perhaps by food and is absorbed through the intestinal tract. It may be carried by flies and is caused by poor sanitation. Those exposed may become carriers for periods of five or six weeks. It occurs most commonly during summer months when food upsets and flies are most prevalent.

Concentration of children in swimming parties and camps, and in new industrial areas seems to cause an increase of cases. Simple clean food, with plenty of rest are the best preventive measures. The Kenny method of treatment was commended.

Fannin County Society

July 19, 1945

Diabetes—T. C. Terrell, Fort Worth.

Fannin County Medical Society met July 19, at the J. and J. Ranch, guests of Dr. Jack Saunders of Bonham.

T. C. Terrell, Fort Worth, gave an interesting and informative technical discussion of diabetes.

Guests, in addition to Dr. Terrell, included Major and Mrs. Joe Risser, J. J. Cappleman, and Sidney P. Sellers, Honey Grove, and Herman Klapproth, Sherman.

Prior to the scientific program, barbecued chicken was served.

Gray-Wheeler Counties Society

July 19, 1945

(Reported by H. L. Wilder, Secretary)

Clinical Cases:
Peptic Ulcer and Aneurysm—H. E. Nicholson, Wheeler.
Brain Tumor—J. M. Key, Pampa.
Spongy Abdominal Tumor—R. M. Brown, Pampa.
Tuberculosis—J. B. White, Amarillo.
Psoriasis: Case Report—G. R. Walker, Wheeler.

Gray-Wheeler Counties Medical Society met July 19, at the Hillson Coffee Shop, Pampa, with eight members and visitors present. Major R. M. Bellamy presided in the absence of the president and vice-president. The scientific program as given above was presented.

The case reported by H. E. Nicholson was that of a woman, who had an ulcer of the stomach and an aneurysm of the thoracic aorta. An illustrative roentgenogram was shown. Fluoroscopic examination had revealed the pulsating mass in the mediastinum. The Kahn test was negative.

The case of the brain tumor reported by J. M. Key occurred in a woman, aged 42. She had had headaches intermittently for four years until recently when they became constant. Anesthesia of one side and other signs indicative of brain tumor were present.

The case reported by R. M. Brown was that of a Negro woman who had a tumor simulating pregnancy. Exploratory operation was done, and the abdomen was found to be filled with a soft spongy mass which could only be lifted out in pieces. It was

thought the patient would die but she is recovering.

The talk of J. B. White on tuberculosis was interesting and instructive. The subject received informal discussion by all present.

The case of psoriasis, presented by G. R. Walker, was of many years standing. The condition had been intractable to treatment by a number of physicians and various clinics. The case received general discussion.

J. M. Key was unanimously elected to membership.

A communication from the State Medical Association was read regarding publication in the lay press of the Association's opposition to socialized medicine.

The Society will hold its next meeting at the Pampa Army Air Field, the program to be rendered by medical officers stationed at the field.

Taylor-Jones Counties Society

July 17, 1945

Taylor-Jones Counties Medical Society conducted a mid-summer clinic July 17 at Hendrick Memorial Hospital, Abilene, with an attendance of thirty-one physicians from fourteen west Texas cities. During a morning session, the following program was presented by members of the Taylor-Jones Counties Medical Society:

Cardiac Management of Patients Past Fifty—C. L. Prichard. Abilene.
The Abdomen in General Practice—J. C. Duff, Anson.
Thyroid Diease in this Section—W. V. Ramsey, Abilene.
Staphylococcus Septicemia and Its Treatment with Penicillin and Sulfa Drugs—Earl D. Sellers, Abilene.

The following program was presented during the afternoon session by guest speakers:

Treatment of Syphilis and Gonorrhea with Penicillin at the U. S. Rapid Treatment Center, Mineral Wells—E. S. Osborne, U. S. Public Health Service.
Early Ambulation of Surgical Patients—John V. Goode, Southwestern Medical College, Dallas.
Heart Disease—Tinsly Harrison, Dean, Southwestern Medical College, Dallas.

Dr. Goode emphasized it has been found that surgical patients do better when not confined to bed for long periods as formerly.

Dr. Harrison pointed out that heart patients respond favorably to limited exercises sooner after being hospitalized than was formerly practiced.

AUXILIARY NOTES

Officers of the Woman's Auxiliary to the State Medical Association of Texas: President, Mrs. C. B. Alexander, San Antonio; President-Elect, Mrs. George Turner, El Paso; First Vice-President, Mrs. S. M. Hill, Dallas; Second Vice-President, Mrs. L. W. O. Janssen, Corpus Christi; Third Vice-President, Mrs. Troy A. Shafer, Harlingen; Fourth Vice-President, Mrs. Mark H. Latimer, Houston; Treasurer, Mrs. F. R. Rugeley, Wharton; Recording Secretary, Mrs. Paul H. Power, Waco; Corresponding Secretary, Mrs. Wilbur Robertson, San Antonio; Publicity Secretary, Mrs. E. L. Howard, Fort Worth; Parliamentarian, Mrs. W. R. Klingensmith, Amarillo.

AUXILIARY NEWS

Travis County Auxiliary recently announced the following officers for the fiscal year beginning in October: Mrs. John A. Crockett, president; Mrs. Truman N. Norris, first vice president; Mrs. Howard E. Smith, second vice president; Mrs. Charles W. Bailey, secretary; Mrs. M. I. Brown, treasurer; Mrs. A. H. Neighbors, publicity chairman, and Mrs. S. E. Hudson, parliamentarian.

Standing committee chairmen have been announced by Mrs. Crockett to be the following: Mrs. C. M. Darnall, philanthropic; Mrs. Truman N. Norris, year book; Mrs. N. I. Schiller, public relations and Hygeia; Mrs. R. A. Cooper, archives; Mrs. J. C. Thomas, Red Cross; Mrs. J. R. Nichols, courtesy; Mrs. J. M. Coleman, well baby conference.

BOOK NOTES

[1]**Medical Diagnosis, Applied Physical Diagnosis.** Edited by Roscoe L. Pullen, A. B., M. D. Instructor in Medicine, Tulane University of Louisiana School of Medicine; Assistant Clinical Director, Charity Hospital of Louisiana at New Orleans. With a foreword by John H. Musser, B. S., M. D., F. A. C. P., Professor of Medicine, Tulane University of Louisiana School of Medicine. With 584 illustrations and 12 color plates. Cloth, 1,106 pages. Price $10.00. Philadelphia and London, W. B. Saunders Company, 1944.

The editor of this volume has endeavored to incorporate in one volume the usual features contained in every book on the diagnosis of disease with the details involved in making a thorough physical examination.

In this new volume of 1,100 interesting pages the entire field of medical diagnosis is covered thoroughly. The order of arrangement is one of the attractive features. The book is divided into sections beginning with the skin and including the neurologic examination and the endocrine survey. Each chapter is written by an able specialist in his particular field of medicine. Most of these authorities are well known to those who are familiar with medical literature. All the writers are of one accord in insisting upon the thoroughness of physical examination which together with the history and the utilization of the various accessory procedures are the necessary factors in the making of a thoroughly satisfactory medical diagnosis. There is a second portion to the book dealing with some special examinations and problems, which should be of interest to those interested in such subjects.

It would be difficult to suggest any additions that should be made to any of the discussions. The chapter on gynecological and obstetrical diagnosis may appear to be lengthy in comparison with the other sections, but the entire field is adequately covered with no omissions. The chapter on the examination of the heart, by Sodeman, is particularly good. There is also an additional chapter on the electrocardiographic diagnosis, which portion of the laboratory findings is recommended as one of the aids in confirming and completing rather than making a diagnosis.

Without hesitation the book can be recommended as a valuable text for the use of the student of medicine and the general practitioner, and even the specialist.

[2]**Diseases of the Nervous System in Infancy, Childhood and Adolescence.** By Frank R. Ford, M. D., Associate Professor of Neurology, Johns Hopkins University. Second edition. Cloth, 1,143 pages. Price $12.50. Springfield, Illinois, Charles C. Thomas, Publisher, 1944.

This book continues to be the standard textbook and reference book for diseases of the nervous system in children and adolescents. It contains excellent tables of the symptoms and signs of the various vascular syndromes of the nervous system. The material is practical and concisely presented. The written material is profusely illustrated with excellent plates of neuropathological specimens. The various clinical syndromes are covered thoroughly and each disease entity is presented as a unit, with a bibliography at the end of each section. The bibliography is rather brief in some instances and quite complete in others. The general trend of the book is decidedly conservative. The author's attitude in the use of the electroencephalograph in the diag-

[1]Reviewed by L. P. Hightower, M. D., Fort Worth, Texas.
[2]Reviewed by Jack R. Ewalt, M. D., Professor of Neuropsychiatry, University of Texas School of Medicine, Galveston, Texas.

nosis of epilepsy and organic neurological diseases falls short of wholehearted enthusiasm. In the treatment of infectious diseases of the nervous system, the only mention of penicillin is in a brief footnote on one page. While it is true this book went to press prior to widespread civilian use of this new drug, a considerable experience in the treatment of diseases of the nervous system by both the Army and Navy Medical Departments had been reported. Further evidence of conservatism is the author's discussion of the use of fever therapy in the treatment of Sydenham's chorea. The author states that he has seen good results in some cases but remains dubious of its value. On page 950 the author makes a statement concerning the role of trauma in the development of epilepsy with which the reviewer cannot agree. The author says, "However, it must be stated that most cerebral injuries are not followed by convulsions no matter where the lesion is placed or how severe it may be and it is for this reason that the underlying constitutional factor has been postulated." As a matter of fact many studies have shown that the incidence of post-traumatic convulsive disorders vary directly with the amount and the type of injury to the motor area of the brain. All of these shortcomings in the book are minor. The book is heartily recommended to students, general practitioners, and pediatricians as well as neurologists as a reference book for diseases of the nervous system. It will also be a useful book for other physicians, particularly for its descriptions of the various vascular syndromes in the central nervous system.

VENEREAL DISEASE ABSTRACTS*

State and Territorial Health Officers Consider the Problem of Venereal Diseases Control. J. R. Heller, Jr., Journal Venereal Disease Information, Washington, 26:168-175 (August), 1945.

Heller presents data on venereal disease control during the war period and discusses recommendations for improvement.

The most encouraging development in venereal disease control is the rapid treatment center program with the advantages of in-patient care for syphilis, particularly infectious syphilis. Previously, under ordinary out-patient care, only 30 per cent of all patients treated completed the standard course of treatment, as compared with 92 per cent of those admitted to in-patient care who completed intensive therapy. The number of patients seeking in-patient treatment is increasing steadily. The average stay per patient was reduced in six months from 26 days to 13 days.

During the past four years, although Congress has nearly doubled the amount of Federal funds available for venereal disease control, there has been no material increase in either the number of cases of early syphilis admitted to clinics or in the number of cases of syphilis reported by private physicians. Nor has the ratio of early cases to the total admissions changed during this period. However, the number of cases of gonorrhea admitted has increased; the number of clinic visits by gonorrhea patients did not rise correspondingly, probably because of recent therapy changes. Only about 5 per cent of all clinic visits were made each year by persons seeking treatment for gonorrhea, a proportion which has not changed appreciably during the past four years. The increase in funds appropriated has not been accompanied by a corresponding increase in case-finding efficiency.

These data were sent with questions to health officers before the meeting in Washington, D. C., in April 1945, of State and Territorial Health Officers, at which consideration was given to present and future State venereal disease control needs. The U. S. Public Health Service is in full accord with the recommendations approved by State and Territorial health officers for the improvement of venereal disease control. The recommendations are:

Intensification of efforts to increase coöperation of physicians in private practice in the reporting of venereal disease cases and in obtaining contact information.

Consideration of payment to private physicians for making diagnosis and referring cases of infectious venereal disease to rapid treatment centers where suitable public health diagnostic facilities are not available.

Furnishing penicillin to physicians for the treatment of gonorrhea on the same basis that other drugs have been provided for the same purpose.

Expansion of the Public Health Service participation in educational facilities and consultative services as the States individually consider necessary.

Employment of further educational technics, including personal interviews and correspondence, to inform physicians of their importance in the venereal disease program.

Shifting emphasis from treatment to diagnostic and case-finding activities in order to utilize personnel in regular clinics to greater advantage.

Sponsoring of a formal training course of three to nine months for men and women as venereal disease investigators or case-finders by the Public Health Service and making provisions for conferring credit for this course on individuals who meet the institutional requirements.

Establishment of liaison facilities with the Army, the Navy, and the Public Health Service so that men being released from the armed forces who are interested in this type of work may be directed into these special training courses.

Termination of clinic treatment of latent syphilis upon the administration of 30 arsenical and 40 bismuth injections.

Amendment of the monthly clinic report to include data regarding diagnostic and referral activity.

Approval of a plan whereby the Public Health Service would obtain, through simplified cost analysis forms, data necessary for a uniform analysis of current clinic operations, so that new clinic functions can be adjusted effectively.

Utilization of the funds (approximately 4½ million dollars) appropriated by Congress for the in-patient care of venereal disease patients either for the maintenance and operation of rapid treatment centers, or for rental of beds for intensive therapy in already existing institutions. The decision as to which type of facility will be approved in a given locality will be made on the basis of State requests and the needs of the area to be served.

The Economic Cost of Paresis in the United States. Albert P. Iskrant. The Journal of Venereal Disease Information, Washington, 25:175-183 (August), 1945.

The direct cost to the taxpayer of maintaining paretics is over 11 million dollars annually and the money loss of income is approximately 112 million dollars for male paretics.

The cost of maintenance of paretics in 1940 is estimated as approximately 7.5 million dollars for an average resident population of 20,963 in State hospitals and 3.8 million dollars for an average patient population of 5,143 in Veterans' Administration Facilities. Iskrant believes the figure of $11,391,545 is an underestimation of the cost to the taxpayer of

*Abstracts of articles appearing in *The Journal of Venereal Disease Information* (formerly *Venereal Disease Information*), July and August, 1945, numbers prepared by the Venereal Disease Division, U. S. Public Health Service.

the United States of maintaining paretics but it is a definite, calculable cost.

The estimated annual loss of working years of life in the United States caused by paresis is 75,729 man-years and 23,645 woman-years. Divided into occupational groups, the figures for men represent 10,655 professional and kindred workers; 11,793 salespersons; 3,769 clerical workers; 7,194 service workmen; 23,273 skilled workers or craftsmen; 6,138 semi-skilled or production workers; 10,908 unskilled or physical laborers.

The estimate of annual loss of working years and income was based on a probable retirement age of 65. If all paretics who entered mental institutions remained there until death, the total estimated man-years from the median age to 65 would be lost. Since 1922, however, with modern therapy, it has been possible to return some paretics to their normal earning capacity: a ratio of return was calculated as 29 per cent for males and 35 per cent for females. The corresponding rates of loss of earning capacity are 71 per cent for men and 65 per cent for women.

The median age of outset of paresis is 42 for men and 41 for women. The median age of admission for paretics to State institutions is 44 for men and 42 for women. Paresis usually strikes persons around 40 years of age, the age at which men in some occupations have reached their maximum earning capacity.

The true incidence of paresis in any one year is unknown. Some cases never come to the attention of the medical profession, and many of those who receive medical care outside an institution are not reported.

A vigorously prosecuted antisyphilitic program can reduce the incidence of paresis in two ways: by preventing the spread of the infection and by finding and treating early cases of the disease and cases of beginning neurosyphilis before the disease progresses to the late stages.

Clinical Action of Penicillin on the Uterus. Herbert M. Leavitt. The Journal of Venereal Disease Information, Washington, 26:150-153 (July), 1945.

The possibility that penicillin may have effects on the uterus similar to, but less intense than those of ergot, also a mold product, is suggested by a review of records of pregnant women treated with penicillin at the New Mexico Intensive Treatment Center.

Of 21 pregnant women treated for syphilis or gonorrhea with penicillin, 8 manifested symptoms of uterine activity—cramps or bleeding or both. Of the 8 patients showing uterine symptoms, 2 had complete abortions immediately following the use of penicillin.

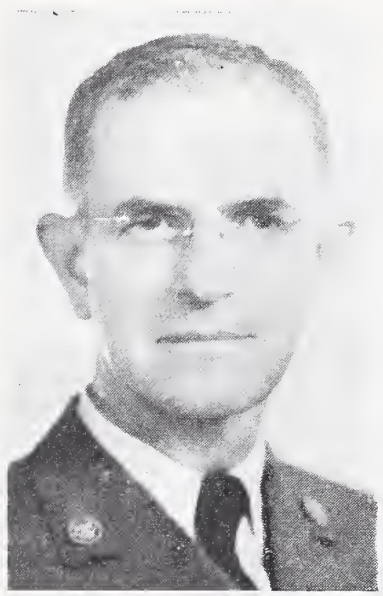
Of the 8 cases in which symptoms occurred, 7 were treated with the same lot of penicillin; 4 other pregnant patients treated with penicillin of the same lot manifested no unusual symptoms. Of 10 pregnant patients treated with penicillin made by 3 other manufacturers, only one showed symptoms. This may suggest that the observed action on the uterus may have been due to an impurity and not to the penicillin itself. Another group of physicians previously had reported 2 cases of threatened abortion following penicillin therapy for syphilis in pregnant women; they interpreted the reaction as a form of therapeutic shock rather than as the result of specific action of penicillin.

Several medical officers in charge of various rapid treatment centers have commented informally on the effect of penicillin in inducing premature menstruation or in prolonging menstruation already started. Effects of penicillin on menstruation have been observed repeatedly at the New Mexico center. Some patients with a history of delayed menstruation promptly began to bleed soon after administration of penicillin. Others bled more profusely or for longer periods of time than normal, and some bled within a week after having completed previous menstruation. A rapid survey of the records of all mature female patients of menstrual age treated with penicillin at the New Mexico Center showed that 17 of 206 patients menstruated during the 24-hour period immediately following beginning of penicillin therapy; this was more than twice the 7.4 who might be expected to menstruate during any given 24-hour period. In a control survey of 253 mature female patients of menstrual age treated by methods not including penicillin only 7 women menstruated during the first 24-hour period following the beginning of treatment.

DEATHS

Dr. Jewel Daughety, of Brownwood, Texas, died February 3, 1945, in a Houston hospital, of carcinoma.

Dr. Daughety was born July 4, 1887, in Saulsburg, Tennessee, the son of Ruben and Elizabeth (McClary) Daughety. His academic education was received in the Saulsburg Academy and Southern Methodist University, Dallas. His medical education was obtained in the medical department of Southern Methodist University, from which he was graduated in 1914. He began the practice of medicine in Dallas, where he remained until 1921, when he removed to Brownwood, which was his home the remainder of his professional life.



DR. JEWEL DAUGHETY

Dr. Daughety has been a member for many years of the State Medical Association and the American Medical Association, through the Dallas County Medical Society while living in Dallas and the Brown County and Brown-Comanche-Mills-San Saba Counties Medical Society after his location in Brownwood. He was a charter member of the last named organization. For many years he was chief surgeon of the Central Texas Hospital, Brownwood.

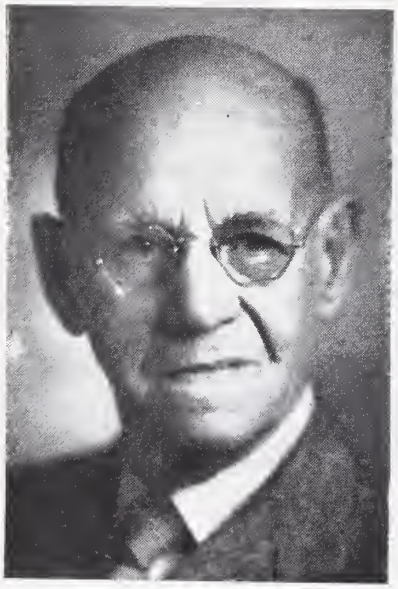
Dr. Daughety took an active part in the civic and religious life of Brownwood. He had served as a member of the board of trustees of Howard Payne College since 1924. During the same period of time, he was physician for athletic teams of the college. As evidence of the esteem in which he was held by students, an edition of "The Lasso," Howard Payne's annual, was dedicated to him in the following words: "Physician-citizen-teacher—loved by the entire athletic team—respected by the student body—a welcome visitor wherever he goes upon the campus." Dr. Daughety was a member of the Baptist Church,

which institution he had served as a deacon since 1923. Since 1924 he had served as a teacher of the Berean Bible Class, composed of Howard Payne students. For several years he conducted a radio Sunday school lesson review every Saturday over KVWD. He was a Mason. He was especially interested in Boy Scout work. He had served as president of the Comanche Trail Council of the Boy Scouts and had been president emeritus of the council since 1936. He had previously served several years as a member of the executive board. He was one of the organizers and a charter member of the council, established in 1928. He held the Silver Beaver award, the highest award in scouting. Shortly before his death he was awarded a 25-year Boy Scout service pin, which he prized highly. He was a highly esteemed physician and public spirited citizen.

Dr. Daughety was married May 1, 1910, to Miss Marie Oswald, at Marshall, Texas. He is survived by his wife, and two sons, R. O. Daughety, business manager, Hermann Hospital, Houston, and Jewel Donald Daughety, now a student in Baylor University College of Medicine, Houston. He is also survived by a sister, Mrs. E. M. Goddard, Brownwood, and three brothers, J. Kelley Daughety, Brownwood; R. B. Daughety, Dallas, and W. S. Daughety, Linden.

Dr. George Delos Beech, Rio Hondo, Texas, died July 5, 1945, of heart disease.

Dr. Beech was born March 24, 1868, in Mineral Point, Wisconsin, the son of Mr. and Mrs. Delos Beech. His academic education was received in the schools of his community. His medical education was obtained in Rush Medical College, from which he was graduated in 1891. While studying medicine he served as an instructor in anatomy in the Illinois Dental College. He served an internship in the Presbyterian Hospital, Chicago. He then lived and practiced in Ishpeming, Michigan, two years; was surgeon for a mining company at Champion, Michigan, eighteen years, and had lived and practiced in Baraboo, Wisconsin, ten years and Adams, Wisconsin, thirteen years before coming to Texas. He had lived and practiced in Rio Hondo for the past eighteen years.



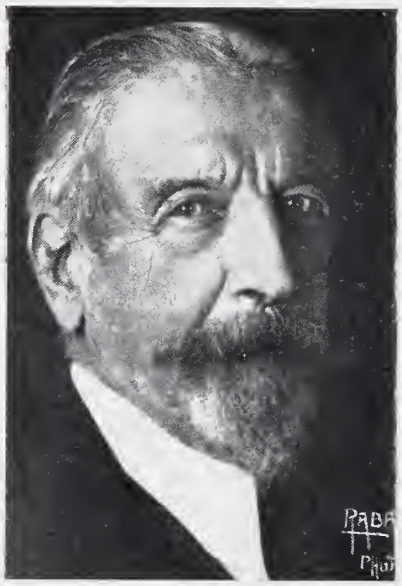
DR. GEORGE DELOS BEECH

After his location in Texas, Dr. Beech had been a member of the Cameron-Willacy County Medical Society, State Medical Association and American Medical Association. He served as president of the Cameron-Willacy County Medical Society in 1935. He was a member of the Methodist Church and a Mason. Dr. Beech took an active part in the civic life of his community and had served Rio Hondo as mayor. He was held in the highest esteem by all who knew him.

Dr. Beech was married September 5, 1894, to Miss Minnie C. Spalding of Ishpeming, Michigan. He is survived by his wife; a daughter, Mrs. Harry W. Fields, Alice, and a brother, Curtis Beech, Mazomanie, Wisconsin.

Dr. George Graham Watts of San Antonio, Texas, died July 11, 1945, in a San Antonio hospital, of uremia and general sclerosis.

Dr. Watts was born February 4, 1851 in London, England, the son of Edward Rafael and Maria (Swinney) Watts. His father was Scotch and his mother was Welsh. His academic education was received in Cheltenham College from which he received an M. A. degree. His medical education was obtained in the University of Edinburgh, Scotland, and in Bonn University, Germany, from which latter institution he was graduated in 1881. After graduation he served for one year as an assistant obstetrician and gynecologist in Bonn University. He then lived and practiced in Nice, France, before coming to the United States in 1882, in which year he located in San Antonio, which was his home for the remainder of his professional life.



DR. GEORGE GRAHAM WATTS

Dr. Watts was a member of the Bexar County Medical Association before the organization of the present Bexar County Medical Society, in 1904. He was a charter member of both organizations, a member of the State Medical Association and American Medical Association. He was elected an honorary member of the State Medical Association in 1926, which membership status continued until his death. He was a member of the West Texas Medical Society, a predecessor to the South Texas District Medical Society, of which he was also a member after its organization.

Dr. Watts' life spanned four major wars in two of which he had an active part. He served as an ambulance driver in the Franco-Prussian War in 1870, and as an Assistant Surgeon at Fort Sam Houston during the Spanish-American War. During World War I he served in the Surgeon's Office at Fort Sam Houston.

When Dr. Watts located in San Antonio the city had a population of 17,000. He had a part in the establishment of the San Antonio Infirmary in 1895 and the Physicians and Surgeons Hospital in San Antonio in 1903. He was intensely interested in everything pertaining to medicine. He worked with the late Dr. Charles A. R. Campbell, who originated the bat roosts in San Antonio in malaria research work. He also warned cattlemen regarding tick fever, now known as Bullis Fever, and advocated dipping of cattle.

Much of the colorful life of this historical Texas city was reflected in the career of Dr. Watts, pioneer

distinguished surgeon. As physician for the Actors' Guild of America, for this section, he entertained and was intimately associated with many national celebrities, including Sarah Bernhart and other world famous actors and actresses. He was a close friend of Cadet Charles Lindberg when the latter was stationed at Brooks Field.

At the age of 70, Dr. Watts attempted to secure a pilot's license and only his vision prevented him from doing so. During his active career he kept a stable of horses and a pack of hunting dogs. He once captured a young mountain lion on a hunting trip and kept it as a pet until it died of old age.

Dr. Watts' death at the age of 94 closed a career of not only a colorful and interesting physician, but that of a pioneer surgeon who contributed materially to the advancement of medicine and surgery in the early history of Texas.

Dr. Watts was married February 15, 1877, to Mary Kay, St. Mary's Parish, Middlesex, England. His wife preceded him in death in 1908. He is survived by one daughter, Mrs. Barnard Turnbull, San Antonio; and three sons, Dr. J. A. Watts, San Antonio; Hugh T. Watts of Santa Monica, California, and Mason Watts of Mexico City.

Dr. **John Wesley Kenney** of San Antonio, Texas, died March 24, 1945, at his home, of paralysis agitans.

Dr. Kenney was born December 27, 1871, at Goliad, Texas, the son of John Wesley and Eliza (Gibson) Kenney. His academic education was received in public and private schools of San Antonio and Southwestern University of Georgetown. His medical education was obtained in the Tulane University School of Medicine, New Orleans, from which he was graduated April 18, 1894. After graduation he was a surgeon for the Consolidated Kansas City Smelting & Refining Company for two years. He was then surgeon of American Silver Mines, Cook's Peak, New Mexico, until 1899, at which time he located in San Antonio, which was his home for the remainder of his professional life.

DR. JOHN WESLEY KENNEY

Dr. Kenney was a member of the Bexar County Medical Society, State Medical Association and American Medical Association through his active years of practice. He was a member of the Southwest Texas District Medical Society. He owned and operated a private sanatorium in San Antonio, with a training school for nurses, for thirty-seven years. During his active life he had kept well abreast of surgical advances by attendance on clinical centers in this country and abroad. He attended the International Congress of Surgeons in London, England, and visited hospitals in Germany, France, Italy, Switzerland and Austria. He was held in high regard by his medical associates. He was compelled to retire from active practice in 1940, because of ill health.

Dr. Kenney was a member of the Methodist Church, which he had served as trustee. He was a Mason, a member of the Alzafar Shrine and Woodmen of the World.

Dr. Kenney was married November 29, 1899, to Miss Lillie Tabor Vance, of San Antonio. His wife preceded him in death. He is survived by a daughter, Mrs. R. F. Hallock, and three granddaughters, Lillian V., Patricia Ann and Joan Kenney Hallock, of San Antonio; a foster son, Cpl. Jack W. Kenney; a foster daughter, Miss Maxine Wood, two sisters, Misses Mayme and Pearl Kenney; three brothers, Samuel Houston Kenney of Fulton, William Thomas Kenney of Boerne and Dr. Nat M. Kenney of San Antonio.

Dr. **Henry Houston Ogilvie** of San Antonio, Texas, died June 15, 1945, in a New Orleans hospital, of suppurative cholangitis.

Dr. Ogilvie was born February 7, 1885, in Melissa. Texas, the son of Frederick Henry and Virginia (Graves) Ogilvie. His academic education was received in Baylor University, Waco. His medical education was obtained in the University of Texas School of Medicine, Galveston, from which he was graduated in 1910. After graduation he served an internship in Santa Rosa Infirmary, San Antonio. He had been in active surgical practice in San Antonio from 1911 until ill health compelled his retirement August 1, 1940, with the exception of a period of service in the Medical Corps of the United States Army during World War I. He was commissioned a First Lieutenant in the Medical Reserve Corps in 1911 and was promoted to Captain in 1917. He was ordered to active duty in 1918. After attending a School of Fractures and War Surgery, New Orleans, he served overseas in France. He returned to civilian practice in 1919, retaining a commission of Major in the Medical Reserve Corps of the Army of the United States.

DR. HENRY HOUSTON OGILVIE

Dr. Ogilvie was a member continuously of the Bexar County Medical Society, State Medical Association and American Medical Association from 1911 until his death. He was also a member of the Fifth District Medical Society, Southern Medical Association, Surgical Congress and of the United States Chapter, International College of Surgeons. In 1931 Dr. Ogilvie was awarded the annual Case Record prize given annually by Surgery, Gynecology and Obstetrics for the most acceptable set of case records of applicants for fellowship in the American College of Surgeons. This honor carried

with it a life fellowship in the college. Dr. Ogilvie had served Bexar County Medical Society and the Fifth District Medical Society as Secretary. He had also served Bexar County Medical Society as Chairman of its Board of Censors and as Chairman of its Library Committee. He was Chief of the Surgical Staff of the Robert B. Green Memorial Hospital from 1914 to 1916, inclusive, and a member of the surgical staff during his active professional career. He had also served as a member of the advisory board and of the active staff of the Medical and Surgical Memorial Hospital until ill health compelled his retirement. He was also a member of the staff of Nix Hospital.

After his retirement he continued to render outstanding public service during the past war as Chief of Emergency Medical Service for San Antonio and Bexar County Office of Civilian Defense. He was cited by the Office of Civilian Defense, Washington, D. C., in 1943, for one of the most effective emergency hospital organizations in the United States. He organized and equipped 84 emergency first-aid, medical and surgical units, with 1,824 beds, in schools, churches and hospitals, to care for potential patients of air-raids, sabotage or other enemy action. He gave active leadership and direction in the civilian blood bank movement. He was a founder and consistent friend of the San Antonio Boy's Club.

Dr. Ogilvie was a member of the Baptist Church and a Scottish Rite Mason. He was a member of Alzafar Temple, and of the San Antonio Chapter and Council. He was also a member of the order of the Eastern Star, The American Legion, Disabled American Veterans of the World War, Veterans of Foreign Wars of the United States, the Forty and Eight, and the Order of Elks. His devotion to the public welfare was recognized editorially in the San Antonio *Express* on the occasion of his death, which stated that "Throughout his 35 years as a practicing physician and surgeon in San Antonio, while earning wide recognition in his profession, Dr. H. H. Ogilvie served the entire community usefully and with distinction. His civic interests were numerous and he pursued them with exemplary, unselfish devotion, clear understanding and skill to their objectives."

Dr. Ogilvie was married December 24, 1911, to Miss Raymond Briggs, in Dallas. He is survived by his wife, a daughter, Miss Virginia Cooke Ogilvie, San Antonio; a sister, Mrs. Rena Leigh, San Antonio, and a brother, Fred Ogilvie of Anna, Texas.

Dr. Clarence Frederick Fowler of Galveston, Texas, died June 30, 1945, in his office, of coronary occlusion.

Dr. Fowler was born November 10, 1888, in Farmersville, Texas, the son of Dr. W. Y. and Jane (Prater) Fowler. His academic education was received in the Behrns School, San Saba, and the Austin Academy, Austin. His medical education was received in the University of Texas, School of Medicine, from which he was graduated in 1914. He served an internship in John Sealy Hospital, Galveston, following which he spent two years at the Brooklyn Eye and Ear Hospital. He then located in Galveston for the practice of the specialty of eye, ear, nose and throat, which was his home for the remainder of his professional life.

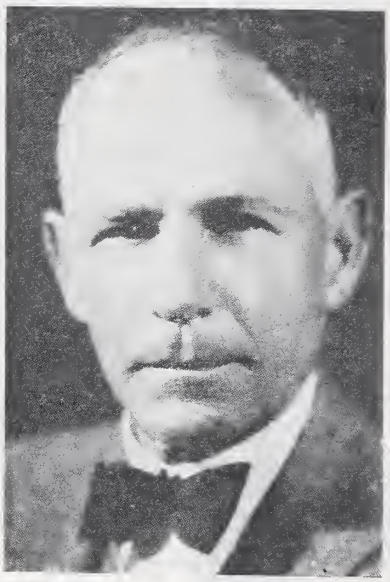
Dr. Fowler was a member of the Galveston County Medical Society, State Medical Association and American Medical Association throughout his professional career. He was also a member of the Texas Ophthalmological and Oto-Laryngological Society.

During World War I he served twenty-two months as a medical officer in the United States Army. He was a competent practitioner in his chosen specialty and was held in the highest esteem by his medical associates and all who knew him.

Dr. Fowler is survived by his wife, the former Miss Margaret Donoghue, of Galveston, to whom he was married November 8, 1917, in New York City. He is also survived by a brother, William Y. Fowler, Llano.

Dr. John Bohan York of Houston, Texas, died June 15, 1945, of uremia and cerebral hemorrhage.

Dr. York was born September 19, 1871, in Jackson County, Texas, the son of Jabez and Maria Louise Rucker York. His academic education was received in Victoria Seminary and St. Mary's College, San Antonio. His medical education was obtained in the Medical College of Ohio, Cincinnati, from which he was graduated in 1896. He began the practice of medicine in Brenham, Texas, where he remained until 1902. He then moved to Houston, which was his home for the remainder of his life.



DR. J. B. YORK

Dr. York was a charter member of the Harris County Medical Society, and a member of the State Medical Association and American Medical Association. He was a member in good standing in these organizations at the time of his death. Dr. York served Harris County Medical Society as vice-president in 1918. He had been employed as alienist for Harris County since 1912 and had been in charge of the Harris County Psychiatric Ward since its establishment in 1912 until the present, with the exception of a three year period from 1935 to 1938. The ward was established on his recommendation that mentally ill patients should not be confined with other prisoners in the county jail and cared for only by guards and janitors. His first work in this connection was without remuneration but after his value and need became recognized, he was paid a salary which, while inadequate, at least partly compensated for the services rendered. Eventually adequate appropriations were made for the conduct of the ward. Public officials expressed commendation of the fine service rendered by Dr. York to the mentally ill wards of the county during a period when he rejected substantial offers for his services in private practice. Dr. York had specialized in psychiatry since 1913. He was credited with the inclusion of a psycopathic ward in the Jefferson Davis Hospital when it was built. Dr. York was a member of the Southern Psychiatric Society and the Neuropsychiatric Society of Houston and Galveston. He served as a member of examining boards for Selective Service in both the first and second World Wars. He was a member of the Episcopal Church.

Dr. York was married to Miss Mabel Thistle of Richmond, Texas, in 1897. He is survived by his wife, a daughter, Mrs. Henry F. Jackson, St. Louis, Missouri, and a son, Barry York, Houston.

Texas State Journal of Medicine

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[1]Deceased.

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

The Victory Loan Drive will get under way this month, October 29, to be exact. It is intended that this be the drive to end all such drives, and it is expected that it will go over rapidly and with a minimum of booster trouble.

It will be remembered that we were promised that there would be only one more such drive following the Seventh War Loan Drive, and the promise stands. However, as we urged in our discussion of the last drive, it is not merely a drive. It is at the same time an opportunity to invest our money in about the best paying gilt-edged securities in the world, and make a necessary contribution to the war effort. It might be asked whether the end of the war should not be the end to such drives. The answer is easy. It will be, but it cannot be so immediately. It takes money to close the deal, and money in astronomical figures at that. We are being asked to lend the government 11 billion dollars. It will take this amount and more to bring our soldiers back home, and get them separated from the service; set them up for military housekeeping in the Armies of Occupation; bring wounded veterans home, and set up rehabilitation procedures; start the veteran off in his civilian vocation; tide over the reconversion period, including the cancellation and termination of war contracts, a most expensive procedure, indeed, and in general trim down the greatest war machine the world has ever seen.

Since May, 1941, when the war loan program got under way, we have spent the inconceivable sum of 314 billion dollars, most of which was appropriated for the war. During this same period of time, the income to the government was 128 billion dollars, mostly from income taxes. Thus, 41 cents out of every dollar was raised by taxation, and other non-borrowing revenues. This figure compares with 21 cents out of every dollar raised during World War I. With 128 billion dollars of income, and 314 billion dollars of expenditure, there has been a deficit of 186 billion dollars. In order to meet this deficit, and provide a working balance of 20 billion dollars, we have borrowed from ourselves some 206 billion dollars, 120 billion of which came from non-bank investors, and 86 billion from the banks. Of the non-bank loans, 49 billion dollars came from individuals. This has helped to prevent the inflation spiral by taking up the financial slack. It has cost us 1.75 per cent to raise this money, as against 4 per cent in World War I.

In the beginning of our war loan drive,

the feeling was freely expressed that sales of bonds made under such high pressure and enthusiasm would not produce permanent results, in that people would over-buy and then cash in their bonds. This happened for quite a while, but when it became apparent that these loans were about the best investments we could make, and that they would go a long way towards insuring a very uncertain future, redemptions dropped off notably. It appears that we still have $81.30 out of each $100.00 E bond sold during all the drives.

This sales talk is doubtless hardly justified under the circumstances. Our doctors are patriotic and will make their contributions accordingly. They are quick to realize that a safety deposit box filled fairly full of these little bonds will help out immensely in the future, perhaps when they will need the money. One or two $100.00 E bonds maturing each month, ten years from now, will constitute the best sort of endowment insurance.

While loan drives, under whatsoever name, will not happen again, the same bonds will doubtless continue to be on sale through our banks and other financial institutions. It will be many years before debits and credits incident to this war even begin to catch up with each other, and the difference will continue to be met by taxation of a great variety, perhaps mainly of the income sort, and by loans made by individuals, banks, and investment concerns. Doubtless the banks and investment concerns would even now take up most of the slack and be glad to do it, but gaining possession of the money is not the entire object of the system. Taking the money temporarily from the individual is important in connection with the anticipated inflation.

The names of the drives change, but the slogan "Buy Bonds" remains.

Views of Texas Congressmen on 1945 Version of Wagner-Murray-Dingell Bills.—During the last session of the Congress, when Senators Wagner and Murray and Representative Dingell launched their first bills to legislate socialized medicine on the American public, the Executive Council of the State Medical Association adopted strong resolutions opposing these measures and directed the State Secretary to forward them to Texas members of Congress. That direction was carried out. Texas Congressmen were asked at the same time to give an expression of their views on the legislation for publication in the JOURNAL. Thirteen of twenty-one members of the House of Representatives replied promptly, and their views were published in an editorial in the February, 1944, JOURNAL.[1] Ten of the thirteen replying stated unequivocal opposition to the measures. The remaining three did not favor the bills but neither were their statements against them. Replies received too late for inclusion in that editorial, we are pleased to say, reflected the almost complete opposition of Texas Congressmen to the measures in question.

At the request of the Public Relations Committee, the State Secretary addressed letters to each Texas member of the present Congress, under date of August 2, 1945, enclosing copies of the resolution above referred to as representing the official position of the Association on this legislation, which has for its real purpose the socialization of medicine, which the 1945 Wagner-Murray-Dingell bills propose to effect, despite the published statements of Senator Wagner to the contrary. Copy of the State Secretary's letter, individually addressed to the two Texas Senators and twenty-one Representatives in Congress, follows:

"The Wagner-Murray-Dingell bills are again before Congress. The medical profession of Texas is as strongly opposed to them in their present form as it was to the original measures.

"Some while ago we wrote you, enclosing copy of resolutions adopted by the Executive Council of the State Medical Association of Texas, opposing the passage of these bills. We again presume to call your attention to the resolutions, and a copy is herewith enclosed, since they apply in detail to the two new bills introduced May 24th last.

"The action of our Association was not taken to promote any selfish interests of doctors, as a group or as individuals. The physicians of Texas firmly believe that the institution of socialized medicine, with its heavy tax burden, would wreak a tremendous hardship on the people of this state and the nation at large, and it is on behalf of the public, and the patients who benefit from the skill and protection of Americanized medicine, that the medical profession opposes these socialistic measures. We believe that private enterprises, insurance companies offering medical care policies, and non-profit health insurance plans, in cooperation with the doctors, can and will provide better and cheaper medical care than would a compulsory Federal program, which, incidentally, fails to take into account the penniless and the indigent.

"We would appreciate your views concerning this new legislation so that we may publish them in the Texas State Journal of Medicine for the information of all Texas doctors."

The resolutions referred to in the State Secretary's letter, which have been previously published[2] are reprinted here for the purpose of making this discussion clear and complete. They follow:

"*Whereas*, There has been introduced in the United States Senate, a bill by Senators Wagner and Murray, S. 1161, (1945 number, S. 1050) and a companion measure in the House of Representatives,

1. Expressions from Texas Congressmen on the Wagner-Murray-Dingell Bills (Ed.), Texas State J. Med. 10:509-511 (Feb.) 1944.
2. The Campaign Against the Socialization of Medicine (Ed.) Texas State J. Med. 9:461-462 (Jan.) 1944.

by Representative Dingell, H. R. 2861, (1945 number, H. R. 3293) which bills are pending in Committees of the Senate and House, respectively; and

"*Whereas,* These bills contain provisions which, if enacted into law, would destroy the private practice of medicine in the United States and substitute therefor a system of political, bureaucratic medicine, regimenting the medical profession and hospitals of the United States; and

"*Whereas,* The present system of private practice in the United States has proved by every scientific yardstick, such as mortality rates and reduction of preventable diseases, to be the finest system of medical practice now existing in the world; and

"*Whereas,* The medical profession as the group scientifically qualified by education and training for solving all problems pertaining to medical care, has under study, and, in many places of the United States, where necessary, has in operation prepayment plans for medical service and hospitalization insurance plans for the low income group; and

"*Whereas,* It is believed that the enactment of the bills referred to here would cause medical service to the people of the United States to be far more expensive than the present system of private practice, and

"*Whereas,* It is believed that the bureaucratic, dictatorship plan of medical service provided for by the Wagner-Murray-Dingell bills would result in a greatly inferior quality of medical service to the people of the United States; therefore be it

"*Resolved,* That the Executive Council of the State Medical Association of Texas, the duly elected representative body of the ethical, reputable medical profession of Texas, assembled at San Antonio, Texas, December 13, 1943, declares its unqualified opposition to the medical features of the Wagner-Murray-Dingell bills in the Congress, and be it

"*Resolved,* That the Secretary of the State Medical Association of Texas be directed to advise the U. S. Senators from Texas, and Texas members of the House of Representatives in Congress, of the opposition of the State Medical Association of Texas to the passage of these bills because of the damaging influence that their enactment would have on the public health of the people of the United States; and to request the aid of Texas members of Congress in defeating this legislation; and be it further

"*Resolved,* That the Secretary be instructed to send copies of these resolutions to each Texas member of Congress and to make them available to the public press of Texas."

Unfortunately, the State Secretary's letters of August 2, enclosing the resolutions quoted, were received in the Washington office of Texas Congressmen at about the time of the beginning of the summer recess and few received them before leaving for home. When they returned to Washington after the recess there were ample reasons for overlooking the matter. Therefore, a follow-up letter was addressed September 21 to all who had failed to reply. We are quoting here the replies that have been received to date:

SENATOR W. LEE O'DANIEL (Fort Worth), Texas: "I am in receipt of your communication of August 2, enclosing resolution of the Texas State Medical Association in reference to the Wagner-Murray-Dingell bill.

"I enclose herewith copy of a letter which I wrote to a friend during the time that the Wagner-Murray-Dingell bill was before the last Congress which gives my views in reference to the matter."

(Enclosure referred to in Senator O'Daniel's letter.)

"I have given careful consideration to your recent communication in reference to S. 1161, which was introduced in the Senate by Senators Murray and Wagner.

"Needless to say, I am against regimentation in any form and have so expressed myself on numerous occasions. Generally my views on socialized medicine were expressed in a speech entitled, 'Constitutional Government or Bureaucratic Dictatorship?' which I made in Houston, Texas, on September 2, 1943, and in which I outlined a fifteen point program to correct existing conditions. The thirteenth point in this program reads as follows:

"'Health insurance, industrial insurance, life insurance, and *medical care* have no place in a National Society Security Act. The welfare of the people will be best served if these matters are left in the hands of private industry and organized community charities.'

"Those who are familiar with the manner in which legislation is handled, rarely expect a United States Senator to commit himself definitely on proposed legislation until such proposals come up for debate on the Senate floor, because proposed bills are often quite different from bills on which we finally vote."

HON. WRIGHT PATMAN (Texarkana), 1st District (Bowie, Cass, Delta, Franklin, Harrison, Hopkins, Lamar, Marion, Morris, Red River, Titus Counties): "The Wagner-Murray-Dingell bill is a very long comprehensive measure. It involves many different issues, as I understand it. One is the question of medicine and hospitalization. I want you to know that I am opposed to any legislation that will deprive any patient of the right to select his own doctor, his own nurse, or his own hospital. In other words, Doctor, I am opposed to socialized medicine."

HON. LINDLEY BECKWORTH (Gilmer), 3rd District (Camp, Gregg, Panola, Rusk, Smith, Upshur, Van Zandt, Wood Counties): "Thank you for your letter of August 2. As I have written you before, I do not favor socialized medicine. I feel the doctors have done a wonderfully fine job of work."

HON. HATTON W. SUMNERS (Dallas), 5th District (Dallas County): "Your letter of September 21 has been received. Quite probably your letter of August 2 came while I was away from Washington, and, insofar as I recall, it has not reached my attention.

"I am opposed to the Wagner-Murray-Dingell bills."

HON. LUTHER A. JOHNSON (Corsicana), 6th District (Brazos, Ellis, Freestone, Hill, Leon, Limestone, Navarro, Robertson Counties): "Upon my return to Washington, I find your letter of August 2nd, which came in my absence, concerning the Wagner-Murray-Dingell Bill.

"I stated my position to you upon this bill at the last session of Congress, and it has not changed. I am opposed to socialized medicine."

HON. TOM PICKETT (Palestine), 7th District (Anderson, Cherokee, Grimes, Henderson, Houston, Madison, Montgomery, Nacogdoches, Polk, San Jacinto, Trinity, Walker Counties): "Your letter of September 21 asking me to state my position on the Wagner-Murray-Dingell 'socialized medicine' bill now pending, and in which you allude to a previous letter, has been received. I regret that your first letter reached the office after my departure for Texas in July and you, therefore, did not receive a personal answer from me.

"In order that there may be no misunderstanding let me advise you I am opposed to the principles of socialized medicine as proposed in the Wagner-Murray-Dingell bill."

HON. J. J. MANSFIELD (Columbus), 9th District (Austin, Brazoria, Calhoun, Chambers, Colorado,

Fayette, Fort Bend, Galveston, Goliad, Jackson, Lavaca, Matagorda, Victoria, Waller, Wharton Counties): "I have your letter of August 2nd and in reply, will say that I am opposed to the provisions of the so-called Wagner-Murray-Dingell bills. It does not seem likely that this proposal will come before the House during the present session, but if it should, I shall oppose it."

Hon. Lyndon B. Johnson (Johnson City), 10th District (Bastrop, Blanco, Burleson, Burnet, Caldwell, Hays, Lee, Travis, Washington, Williamson Counties): "I have your letter of August 2nd, together with the resolution passed by the State Medical Association in opposition to the Wagner-Murray-Dingell bill.

"I have tried to make my position with reference to this legislation clear to everyone in my district, and I have seen no reason to change the attitude I expressed last year, which was that I was opposed to the bill, and that in the event it was presented to Congress for action I planned to fight it with every facility at my command."

Hon. W. R. Poage (Waco), 11th District (Bell, Bosque, Coryell, Falls, McLennan, Milam Counties): "Your communication of August 2, addressed to me and to other members of Congress at Washington, has just been forwarded by my Washington office, and I have this morning received it in Waco. . . .

"I have, of course, expressed myself on this matter on several previous occasions. I have had no occasion to change my views. I do not believe in socialized medicine. I want the privilege of selecting my own physician, and I believe that every other citizen wants and should have the same privilege.

"I note with interest your approval of health insurance plans. It seems to me that health insurance is better calculated to give the average citizen the protection that he desires and at the same time retains for him the freedom of choice to which he is entitled than is any program of socialized medicine, under which the government would attempt to provide medical treatment at the hands of publicly paid physicians.

"The Army has socialized medicine, but the physicians who are providing the service are doing so with the understanding that they are making a sacrifice for their government, and the men whom they are treating are receiving this treatment realizing that it is impossible to have their own family physician present during their military service, but I believe that it is safe to say that most of the men and most of the physicians want to be home where they can make their own selections and deal on a personal rather than a collective basis. I want them to have an opportunity to come back to that kind of society. Doubtless we must endure regimentation in order to win wars, but I hope it will not be necessary for us to live in a permanently regimented world."

Hon. Ed Gossett (Wichita Falls), 13th District (Archer, Baylor, Clay, Cooke, Denton, Foard, Hardeman, Jack, Knox, Montague, Throckmorton, Wichita, Wilbarger, Wise, Young Counties): "I have just got back to my office after some weeks absence and find your letter of August 2.

"I believe I have heretofore written you of my opposition to socialized medicine. I have expressed this opinion on many occasions. I certainly am not in favor of the Wagner-Murray-Dingell bill about which you have written. I am a strong devotee of our American system of free enterprise and individual action. I have long said the greatest immediate threat to general welfare on the domestic front is the growing size, cost, and activity of the federal government. We should shun as a plague any and everything which rewards indolence and penalizes diligence, or seeks to destroy the individual initiative of the average American citizen."

Hon. John E. Lyle (Corpus Christi), 14th District (Aransas, Atascosa, Bee, Brooks, Comal, DeWitt, Duval, Gonzales, Guadalupe, Jim Wells, Karnes, Kenedy, Kleberg, Live Oak, McMullen, Nueces, Refugio, San Patricio, Wilson Counties): "Thank you for your letter of September 21 regarding legislation now pending before Congress affecting the medical profession.

"I am unqualifiedly opposed to socializing the profession; however, it is not my policy to make statements affecting particular legislation until such time as it is up for debate in the House.

"I sincerely appreciate your interest and the interest of your profession in this matter, and assure you that I shall never consent to any act which I feel would be detrimental to either America or the medical profession."

Hon. Milton H. West (Brownsville), 15th District (Cameron, Dimmit, Frio, Hidalgo, Jim Hogg, La Salle, Maverick, Medina, Starr, Webb, Willacy, Zapata, Zavala Counties): "This will acknowledge your letter of September 21, requesting me to advise you as to my position in regard to the Wagner-Murray-Dingell bills, which have been introduced in Congress.

"For your information, I am opposed to socialized medicine—have consistently opposed legislation of a socialistic nature, and as long as I am in office I expect to do my utmost to defeat legislation of this type.

"Incidentally, you might be interested to know I am receiving some very severe criticism of the medical men and their method of operation—not from the average citizen, but from professional men, which is a surprise to me.

"There is no record in my files of having received a letter from you under date of August 2."

Hon. Robert Ewing Thomason (El Paso), 16th District (Brewster, Crane, Crockett, Culberson, Ector, El Paso, Glasscock, Hudspeth, Jeff Davis, Loving, Midland, Pecos, Presidio, Reagan, Reeves, Terrell, Upton, Ward, Winkler Counties): "I have your letter of the 21st instant. The status of the Wagner-Murray-Dingell Bill and my views concerning same are identical with those I gave when I wrote you on February 4, 1944, and which, as I remember, you published in your Journal."

(Letter of Mr. Thomason of Feb. 4, 1944, referred to by him, published in the February, 1944, Journal, and republished here as an expression of his views on the legislation under discussion.)

"My Committee meets nearly every day in connection with important war problems: I have recently been appointed to a Postwar Planning Committee of the House and we are getting under way, with meetings scheduled this week. I mention these things to let you know why I have not had opportunity to study this measure as closely as I intend to do a little later. But wanted you to know that I have talked to Senator Connally about it and he said no hearings had been set by the Senate Committee and none scheduled. He expressed the opinion that the opponents of the measure have nothing to worry about at this time and in this belief I concur.

"Bills are sometimes so amended in Committee as to change their entire meaning and purpose, and it is therefore impossible to predict with certainty what will happen. If and when this bill ever comes to the House, it will have my exhaustive study and careful consideration. I will never vote for any plan to have the Federal Government take over the private practice of medicine. I may say that I have supported and will continue to support sound social security legislation, as I feel the features of this law that guarantee retirement annuities, old age pensions and unemployment insurance should be retained by all means.

"To mention a personal matter, my father was an

active practitioner of medicine for forty years, and he enjoyed the confidence of the doctors throughout our community. As a young district attorney at Gainesville, I was the first to prosecute and convict the quacks and medical imposters in that District. As a Member of the Legislature and Speaker of the House, I was one of the managers who handled the medical-practice bill that became the law in Texas. I think you will remember this, and I know that Dr. Cary of Dallas will. Last July there was a spirited debate in the House here as to what physicians might treat the wives of soldiers in maternity cases. I was one of the few from our State who voted in favor of the regular physician."

HON. SAM RUSSELL (Stephenville), 17th District (Callahan, Comanche, Eastland, Erath, Fisher, Hamilton, Jones, Nolan, Palo Pinto, Shackelford, Stephens, Taylor Counties): "I dropped into Washington this morning on a few days' business for the District, and your letter of August 2nd, together with my secretary's answer of August 6th, was called to my attention.

"My secretary has explained fully to you my standing on the Wagner-Murray-Dingell Bill, and I could not add anything more to what she has said. I believe I expressed this same opposition to you in a letter during the 78th Congress. I still do not have reasons to change my mind."

HON. GENE WORLEY, (Shamrock), 18th District (Armstrong, Briscoe, Carson, Castro, Childress, Collingsworth, Cottle, Dallam, Deaf Smith, Donley, Gray, Hall, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Moore, Motley, Ochiltree, Oldham, Parmer, Potter, Randall, Roberts, Sherman, Swisher, Wheeler Counties): "This will acknowledge with thanks receipt of your letter and enclosure of August 2.

"I am not familiar with the new version of the Wagner-Murray-Dingell bills, but as you know I have previously stated my opposition to several pieces of legislation which would disturb or destroy the very good work being done by the medical profession. You may be sure my views in this respect have not changed."

HON. PAUL J. KILDAY (San Antonio), 20th District (Bexar County): "This will acknowledge the receipt of yours of September 21st, in which you request a statement on my position with reference to the socialized medicine provisions of the Wagner-Murray-Dingell bill.

"You can be sure that I am opposed to this provision, and that I shall actively oppose any proposal for the socialization of the medical profession."

HON. O. C. FISHER (San Angelo), 21st District (Bandera, Brown, Coke, Coleman, Concho, Edwards, Gillespie, Irion, Kendall, Kerr, Kimble, Kinney, Lampasas, Llano, McCulloch, Mason, Menard, Mills, Real, Runnels, San Saba, Schleicher, Sterling, Sutton, Tom Green, Uvalde, Val Verde Counties): "Reference is made to your letter of September 21, pertaining to the proposal now pending in Congress, which would have the effect of socializing the practice of medicine. I am glad to inform you that I am opposed to this legislation. I feel that the medical profession has made tremendous progress which should not be jeopardized by the proposed compulsory Federal plan."

It will be noted that replies are published here from one of Texas' two senators, and from sixteen of the twenty-one members of the House of Representatives. It will be further noted that each of the seventeen quoted have stated frankly and unequivocally their opposition to the socialization of medicine.

Congressmen who have not so far furnished the State Secretary with a statement for publication are:

SENATOR TOM CONNALLY (Marlin), Texas.

HON. J. M. COMBS (Beaumont), 2nd District (Angelina, Hardin, Jasper, Jefferson, Liberty, Newton, Orange, Sabine, San Augustine, Shelby, Tyler Counties).

HON. SAM RAYBURN (Bonham), 4th District(Collin, Fannin, Grayson, Hunt, Kaufman, Rains, Rockwall Counties).

HON. ALBERT THOMAS (Houston), 8th District (Harris County).

HON. FRITZ GARLAND LANHAM (Fort Worth), 12th District (Hood, Johnson, Parker, Somervell, Tarrant Counties).

HON. GEO. H. MAHON (Colorado City), 19th District (Andrews, Bailey, Borden, Cochran, Crosby, Dawson, Dickens, Floyd, Gaines, Garza, Hale, Haskell, Hockley, Howard, Kent, King, Lamb, Lubbock, Lynn, Martin, Mitchell, Scurry, Stonewall, Terry, Yoakum Counties).

Members of the Association who have representatives in Congress, whose views are not quoted here, may render a service to medicine and the public health by communicating personally with them on the matter. They will be interested in our views. They will appreciate letters from their constituents on any matter before the Congress.

Some may be of the opinion that because their Congressmen are known to be opposed to the socialization of medicine, there is no need to write; that they should not be bothered with letters of that sort. Nothing could be farther from the truth. It is certain that those who favor the socialization of medicine, even though they may be a misguided minority, will write, and if a Congressman receives only letters of that kind, how is he to be certain that his position is representative of the wishes of his constituents? He won't know unless he hears from them, and he will be pleased to receive letters approving his position on this subject. He is deserving of thanks.

Therefore, let us determine from our Congressmen themselves their attitude on the socialization of medicine, and if they are right, let us acknowledge their position with appreciation. Write now!

The Southern Medical Association Meeting will be held this year in spite of the disturbed situation arising from the War. This will be good news to many Texas doctors. A meeting of such magnitude and importance cannot be gotten together in a few days time, and the Southern Medical Association is not given to short orders. Any scientific meeting of that organization will be complete and worthwhile. The answer lies in the fact that the Association was ready regardless of war restrictions, and immediately that there was sufficient relaxation of these restrictions, all

that had to be done was to get out the publicity. We are happy to do our part. We owe this service to the medical profession of Texas, not to mention the Southern Medical Association.

The meeting will be held in Cincinnati, Ohio, November 12-15, 1945. It will be sponsored by the Campbell-Kenton County Medical Society of Kentucky. Ohio has merely loaned the use of the larger city. Incidentally, Cincinnati is a good city to visit. We know from experience that this is true. There can be no more elaborate Southern hospitality than is usually extended by this city, ordinarily classified as in the North, or Midwest, or something of the sort. Indeed, we have long since quit looking for differences in hospitality as between cities in the various sections of the country.

This is called the Victory Meeting, as the coincidental loan drive is called the Victory Loan Drive. The designation is significant in each instance. In its twenty-one sections, two general sessions, six conjoint meetings, and the scientific and technical exhibits in a streamlined program, those who attend will get the last word in modern, practical, scientific medicine and surgery.

Members of state and county medical societies in the Southern States are eligible to membership in the Southern Medical Association, and are cordially invited to attend the meeting. The annual dues of $4.00 include subscription to the *Southern Medical Journal*, one of the most valuable medical journals in the country, and one which every physician in the South should receive. State Medical Association membership card is all that is necessary to secure acceptance into membership in the Southern Medical Association.

The scientific program will be supplemented by the six organizations which usually meet conjointly with the Association, namely: American Public Health Association, Southern Branch; National Malaria Society; American Society of Tropical Medicine; American College of Chest Physicians, Southern Chapter; American Academy of Pediatrics, Region 2; and American Therapeutic Society.

While there are only a limited number of hotel rooms available in Cincinnati, every effort will be made by the Hotel Committee to take care of all who attend, first come, first served. All applications for hotel reservations will be handled by and through the Hotel Committee, of which committee Dr. Robert L. Blitz, 910 Dixie Terminal Building, Cincinnati 2, Ohio, is the chairman. The leading hotels in the city are the Netherland Plaza, Gibson, Sinton, Fountain Square, Metropole, Palace, Alms, Broadway, Kemper Lane, Mariemont Inn, and Parkview. Obviously, no time should be lost in writing for hotel accommodations.

Malpractice Liability of Returning Medical Officers is an immediate problem. It will be remembered that early in the war the Judge Advocate of the Army advised that medical officers in the armed services could be sued for medical malpractice, and that while the branch of the service concerned would extend legal service in such suits, under certain conditions, there was no appropriation from which resulting indemnities could be paid. Under the circumstances and in cooperation with the Council on Medical Defense of the State Medical Association of Texas, the Medical Protective Company, long identified with this service to the medical profession of our State, devised a medical malpractice indemnity policy to cover the medical officer in the armed forces, which policy was sold at the rather low rate of $10.00 per year.

Now it transpires that there is a rather general feeling among doctors being released from the service, that their military policies will take care of them until they get well under way again in civil practice; or that, in some way, the fact that they have been engaged in an extremely patriotic and dangerous service would prevent them from suffering the indignities and jeopardies of medical malpractice suits. It was this same feeling which prevented so many medical officers from securing protection of the sort while serving with the armed forces. However, and it goes without the saying, the war has made no change in the responsibilities of the doctor in the practice of medicine, and any doctor who expects to seek the protection of a malpractice indemnity policy should lose no time in doing so after entering civilian practice. The Medical Protective Company, and any other company selling such insurance, will be happy to help the returning medical officer reconvert from military to civilian protection.

In the meantime, it will be remembered by members of our Association, that the Council on Medical Defense of the State Medical Association will do what it can to protect its members in such matters. Even so, it is best that doctors be protected by malpractice insurance. The State Medical Association cannot pay indemnities, and it has been prevented by law from assuming responsibility in lawsuits of the sort, except and unless it secures a charter from the State to enter the insurance business, which it cannot, of course, afford to do.

New Films for the Library.—The Motion Picture Lending Library of the Association has received six additional films for relending. Five of them are suitable for professional audiences and one is suitable for both professional and lay groups. The Library is indebted to E. Fougera & Company, Inc., of New York, for five of these films, and to The National Foundation for Infantile Paralysis for the other one. Grateful appreciation is expressed to these firms for these valuable additions to the film library. Concise descriptions of the films follow:

Nasal Sinusitis. 16 mm., silent, showing time, 30 minutes. (Available through the courtesy of E. Fougera & Company, Inc.) This film presents the complete diagnostic procedure involved in sinus examination. Roentgenograms of many pathologic states of the sinuses are reproduced.

Bronchial Asthma. 16 mm., silent, showing time, 20 minutes. (Available through the courtesy of E. Fougera & Company, Inc.) This film shows the treatment of bronchial asthma by means of intratracheal instillation of lipiodol. The technic of instillation, clinical results, and anatomical drawings are given.

Serial Uterosalpingography. 16 mm., silent, showing time, 30 minutes. (Available through the courtesy of E. Fougera & Company, Inc.) A new method of hystersalpingography is presented. By means of serial roentgenograms, anomalies and pathological changes otherwise impossible of detection are recognized. Interpretations of more than 60 cases are given.

Uterosalpingography. 16 mm., silent, showing time, 40 minutes. (Available through the courtesy of E. Fougera & Company, Inc.) This film presents a comprehensive study of the technic of hysterosalpingography and its important place in gynecologic diagnosis. It is a study of sterility.

Your Fight Against Infantile Paralysis. 16 mm., sound, showing time, 15 minutes. (Available through the courtesy of The National Foundation for Infantile Paralysis, Inc.) This film tells the story of what the National Foundation does in the fight against infantile paralysis. Basil O'Connor, president of the National Foundation, is the narrator.

CURRENT EDITORIAL COMMENT*

Hay Fever and Sinus Disorder.—It is interesting to observe how frequently hay fever and sinus disorder are to be found in the same patient. Often it happens that sufferers from hay fever, anxious to obtain relief from pollen allergens in the late summer, go to northern states or the West Coast. There they find that the unexpected cold often produces serious sinus difficulty. While their hay fever may be relieved, their sinus disorder is often too great to be tolerated. Physicians frequently have a difficult situation confronting them in attempting to deal with patients of this sort.

It appears that such patients have hypersensitive mucous membranes in the upper respiratory tract. Through some combination of physico-chemical and nervous factors they are unable to adjust to the presence of either hay fever allergens or to damp cold. Dr. W. J. Kerr and his associates at the University of California Medical Center, San Francisco, have offered provocative evidence of the manner in which the upper respiratory tract may operate as an air conditioning apparatus, if it functions smoothly. Vascular dilatation and constriction in these areas may adjust to warmth, cold, moisture, or dryness, so as to preserve a relatively constant temperature and humidity factor in air reaching the lungs. In hypersensitive individuals, however, this automatic air conditioning apparatus fails to function, and congestion frequently occurs, with resulting danger of secondary infection and all the complications of sinus disorder.

In dealing with such patients it is wise for physicians to recall the possible advantages of a warm, moist climate in the later summer months along the Texas Gulf Coast. In no other part of the country is there such a relatively constant off-the-water breeze during this period as along the Texas coast. This air is pollen-free and its warmth and moisture content tends to relieve sinus congestion.

Texas is fortunate in having several attractive resort areas along the Gulf Coast. These may well be developed medically for sinus and hay fever sufferers. Opportunities are great for Texas physicians to practice effectively what Drs. C. I. Singer and K. Phillips call "thalassotherapy."[1]

REFERENCE

1. Singer, C. I., and Phillips, K.:American Health Resorts; Thalassotherapy J. A. M. A. 124:1128-1133 (April 15) 1944.

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*This department of the JOURNAL presents editorial comments on current items pertaining to the science, art and practice of medicine, contributed by members of the State Medical Association and scientists closely associated with the medical profession of Texas. Invitation is hereby extended to any member of the State Medical Association of Texas to submit such discussions for this department. The discussions should not be more than 500 words in length.

HEALTH IN HOLLAND

In a cursory report of the health situation in the Netherlands after five years of German occupation, the correspondent of *The Journal of the American Medical Association* states in the July 28 issue that "there was an increase in tuberculosis and infectious diseases, especially diphtheria and scarlet fever."

"A strict control by the state hygienic authorities isolated a few cases of typhus and typhoid and protected the population effectively," the correspondent said, adding: "The death rate of the newborn and young children increased also. . . . At the outbreak of war we had a large store of food, drugs—for instance, insulin—but they were used for the Germans."

REVERSIBLE AND IRREVERSIBLE DISEASE OF THE LIVER WITH REFERENCE TO THE EFFECT OF CHOLINE

GEORGE R. HERRMANN, M. D., and
PAUL A. ROCKWELL, M. D.
GALVESTON, TEXAS

Passive congestion of the liver in heart failure has long been recognized as reversible as long as myocardial insufficiency can be completely overcome and circulatory equilibrium reestablished. Fatty enlargement of the liver has recently been shown to disappear under treatment.[4] In cardiac patients with chronic decompensation, Garvin[14] found cardiac cirrhosis and disturbances in liver function may then persist as shown by Chavez, Sepulveda, and Ortega[6] and in our own studies. Great advances have been made during the war in the cure of fatty cirrhosis and in the apparent interruption of liver necrosis in toxic and infectious hepatitis with subsequent regeneration and reestablishment of normal function by Best and Ridout,[3] Dragstedt and others,[8] Entenman, Montgomery, Chaikoff and Friedlander,[10, 11, 13] and McHenry and Patterson.[18]

The enlarged fatty liver of chronic alcoholism, in whisky as well as in beer drinkers, has been found to respond most spectacularly to the new therapeutic agents reported by Patek and Post,[20] and Fagin and others[12] and in our own cases to be reported here. The fatty liver of pancreatic insufficiency and diabetes mellitus,[3, 8] of lipoid storage diseases such as xanthoma, and psoriasis, and of hyperthyroidism with the diarrhea presumably due to the fatty liver condition, have all responded to lipocaic therapy.

Lipoid metamorphosis of the liver occurring in anemia and severe anoxemia from any cause with acute toxic hepatitis of various types, even to the early stages of yellow atrophy, may reasonably be expected to respond to lipotrophic substances. Fatty degeneration and hepatic necrosis produced by complications in biliary tract disease, such as gallstones and obstruction with jaundice, and the added detrimental effect of anesthetics and the severe hepatic damage of extensive burns have been mentioned as amenable to choline therapy. Beattie[1] described a spectacular case of an aviator who drank an ounce of carbon tetrachloride and whose rapidly and tremendously enlarged liver receded promptly after four injections of 9 Gm. of methionine and only a second intravenous injection, which caused recession of the liver enlargement on the second day. This is an unparalleled therapeutic triumph.

From the Cardiovascular Service of the Department of Medicine, University of Texas School of Medicine, Galveston, Texas.

THE BIOCHEMICAL BACKGROUND

The invaluable therapeutic advances in the management of disorders of the liver stem primarily from the epoch-making studies in the laboratories of Best and Dragstedt. Best and his co-workers ingeniously established the fact that choline was the substance that was active in the prevention and cure of the fatty livers of dogs that had been depancreatized. The term lipocaic was adopted by Dragstedt for an extract of pancreas which he considered to be a new pancreatic hormone. This he has shown was concerned with the transport and utilization of fat, particularly in the liver but also in other systems, heart, arteries, kidneys, nervous system, and skin. Chaikoff and Kaplan[5] prepared an acetone and ether lipotrophic extract of pancreas (Fraction AR.); Wolffe and associates[23] isolated a heat labile "lipolysin" of a deproteinated insulin-free pancreatic extract. Lipolysis has been observed to decrease cholesterol and to increase the phospholipids in the blood and was associated with the appearance of choline or a choline-like substance in the urine which gave positive reactions with Kraut's reagent. This substance, however, unlike choline preparation such as acetyl choline or beta-methyl acetyl choline, produced heart block in atropinized animals.[11]

Experimental hepatitis of four types, acute hemorrhagic, acute fatty infiltrative, subacute degenerative, and chronic insidious diffuse fibrosis, have been produced by numerous investigators in animals, primarily rats, by inadequate protein diets deficient particularly in the sulphur-containing amino acids. György and Goldblatt[15] produced, by low protein diet, a patchy, hemorrhagic, moderately fatty, hepatic degeneration, which eventually became fibrosed and cirrhotic. The authors and others extended the observation and demonstrated prevention by methionine and mixtures of choline and cystine. An imbalance of cystine and choline may produce damage.

Himsworth and Glynn[16] extended these studies and described two types of processes:

An acute type with sudden onset and fatal in a few hours with massive necrosis; at death irregular nodular hyperplasia and searing of the liver were demonstrable.

A chronic type insidiously developing over a period of months with an enlarged liver heavily infiltrated with fat which is gradually replaced by fibrous tissue and without necrosis. This latter type has been related to excess of fat in the diet or deficiency in

lipotrophic substances and is comparable to the reversible human type.

Tucker and Eckstein and their group[21] found that the fatty liver of high fat and low protein diet could be prevented by feeding methionine, whether it was supplied as crystalline methionine or as casein in amounts sufficient to furnish the same quantity of methionine. Animals on diets deficient in proteins, particularly sulphur-containing amino acids, were found to be more susceptible to hepatoxic agents such as carbon tetrachloride, alcohol, chloroform, and phosphorus.[19]

Choline was found to be very efficacious in mobilizing the fat cholesterol and esters from the liver but was not nearly as protective in the prevention of damage as methionine. Betaine and inositol as well as lecithin, choline, and choline precursors, lipocaic, insulin-free pancreatic extracts and yeast, and casein in large doses are lipotrophic substances.

The theories of action of lipotrophic factors are numerous. The change of the fats to phospholipids, which are more easily mobilized, is a likely explanation of lipodystrophy. Beard[2] in 1943 confirmed earlier views that the metabolism of lecithin, of which an amino alcohol choline is a component, was related to a methylated amino acid glycocyamine derivative creatine. Methylation and demethylation reactions, consisting of the addition or subtraction of a methyl group are reactions that have been known to occur in the body for fifty years. Du Vigneaud and associates[9] showed that homocystine only in the presence of betaine or choline will substitute for methionine. Using deuterio methionine, they showed that the methyl group of methionine was employed in the synthesis of choline and creatinine in man. Transmethylation in the human body may be represented by a reversible reaction in which choline and methionine are formed from each other. Ethanolamine is formed from glycine.

$$Ethanolamine + Methionine \rightleftarrows Homocystine + Choline$$

In this reaction methionine is a methyl donator and ethanolamine is the methyl acceptor.

OUR STUDIES

The therapeutic triumph following use of modern principles of treatment in a few cases of apparently advanced hepatomegalic hepatic damage led us to restudy all of our "cirrhosis cases" to determine the conditions under which we might expect good results from the new biochemical therapy. We have long been interested in the functional capacity of the liver in patients with congestive heart failure with respect to blood plasma protein levels, particularly of serum albumin levels and the development of edema in congestive heart failure. Chavez, Sepulveda, and Ortega[6] found abnormal functional states of the liver, as recognized by the usual liver function tests, during the stage of engorgement, and more normal clearances in the same patients as the venous pressure returned to normal.

It would be advantageous to know what liver function tests might give evidence as to the cases that would most likely respond to choline, yeast, hydrolysates, or protein diet therapy. Apparently only cases of fatty hepatomegaly respond. Unfortunately, cases in the series that we have reviewed have been so poorly worked up that our data are incomplete and inadequate for statistical treatment. We decided to study more thoroughly all current medical cases in which there were possible disturbances in liver function. After reviewing all files of patients diagnosed as cirrhosis, we discarded 54 as totally inadequate; 41 of these diagnoses were on patients admitted from 1920 through 1932, and 23 were patients hospitalized between 1932 and 1945. The chief reasons for discarding so many cases were that in most of them the data were inadequate for the establishment of the diagnosis, and confirmatory laboratory studies were not made. The blood serum protein levels were not determined before late in 1931, and the liver function tests were rarely done before 1932. Of the 23 unsatisfactory charts from 1932 to 1945, 17 were on private patients and 6 were on staff ward cases. No special laboratory studies except an occasional icterus index was done on these patients, and the diagnosis was not considered as established on even clinical grounds. Cases diagnosed at laparotomy and at autopsy were accepted.

CLINICAL CRITERIA OF CIRRHOSIS

The minimal reliable clinical criteria for the diagnosis of cirrhosis of the liver consist in major manifestations of a palpable spleen, early liver enlargement with later decrease in liver size, transient attacks of jaundice, ascites, collateral venous engorgement, esophageal varices, rectal hemorrhoids, or umbilical or abdominal varicosities. Major reliable corroborative signs are to be found in the laboratory establishment of (1) abnormal urobilinogenuria of 1 to 40 or more; (2) macrocytic anemia; (3) lowered concentration total blood serum proteins, especially decreased serum albumin, globulin usually showing a compensatory rise; (4) lowered prothrombin levels, (5) retention of 15 per cent or more of bromsulfalein thirty minutes

after injection of 5 mg. per kilogram; (6) decreased abnormal galactose or sugar tolerance; (7) less than 45 per cent of cholesterin esters in total cholesterol; (8) decreased hippuric acid synthesis.

ETIOLOGICAL FACTORS

Thirty-two case records of cirrhosis of the liver were accepted for analysis. In these cases there were 27 white patients and 5 Negroes, 21 of whom were males, and 11 were females.

Heart disease was present in 9 of the 32 cases of cirrhosis; in 3 cases it was severe, in 1 moderate, and in 5 mild. Two patients had hypertensive heart disease with grade 1 or 2 of congestive failure. Three had arteriosclerotic heart disease with congestive failure of grade 1 and 2. Three had rheumatic heart disease, all of higher grades (3 and 4) of congestive failure, and there was 1 case of syphilitic heart disease of grade 3 of congestive heart failure. These cases may represent cardiac cirrhosis. The improvement that we have observed following choline therapy in patients with congested and anoxic liver must not be attributed to the lipotrophic action alone, but may well be due to the increase of available phospholipids and phosphocreatine. The venous pressure, determined in 15 random cases of cirrhosis of the liver, showed elevation in 2, both of which were definite cardiac cases. Venous pressure was determined in the legs in 3 cases of cirrhosis with ascites and was found elevated in 2, in both of which there was normal venous pressure in the anterior cubital veins.

Alcoholism to the point of inebriation as the principal etiological factor was suggested by a history in 20 of the 23 cases; moderate in 3, not clear in 4, not mentioned in 3, and 2 patients were absolute teetotalers. The type of alcoholic beverage was not specified in any cases. The diet was recorded as "adequate" in the two teetotalers, and in one moderate drinker. It was recorded as "good" in one inebriate and "adequate" in 6 other cases. The size of the liver was correlated with the years of drinking. The alcoholics with hepatomegaly are the ones that responded to high protein diet, casein hydrolysates, yeast, and choline, presumably because of the presence of early or fatty cirrhosis.

Serological tests for syphilis were negative in 18 cases, positive in 8 cases, doubtful in 1, negative in 1 extensively treated case, and tests were not made in 2 cases.

DIAGNOSTIC CRITERIA

Ascites was present in 26 of the 32 acceptable cases of cirrhosis of the liver and absent in 6 cases. In the 6 cases in which the diagnoses were made an exploratory laparatomy was done, in 1 case for pain and diarrhea, in 1 for jaundice and suspected carcinoma of the stomach, and in a third for jaundice due to gallstones. Blood serum protein estimations were done in the first 2 cases and were low in the other case subjected to operation, which also showed a normal prothrombin time and bromsulfalein clearance. A fourth preascitic case was that of an inebriate with a large liver, no jaundice, and no proof of the diagnostic data other than low blood plasma proteins. The sixth case, diagnosed cirrhosis in the absence of ascites, was that of a cardiac with jaundice, low blood plasma, and slightly impaired hippuric acid synthesis, with normal bromsulfalein and galactose tolerance, at best a questionable case.

Ankle edema of grades 3 to 4 was present in 26 cases, absent in 3 cases, and not mentioned in 3 cases.

The spleen was felt in 7 cases, not felt in 24 cases, and no mention was made of it in 1 case.

LIVER FUNCTION TESTS

Urobilinogen and urobilin content tests of urine and stool were all too rarely and too carelessly done even by the crude quantitative method. The values were found to be increased when done in patients with signs of cirrhosis.

The icterus index test was done in 25 cases. It was above the level of 15 units in 15 cases; between 11 and 15 units in 5 cases; below 10 in 5 cases. Of the latter 5 cases, cirrhosis was found at laparotomy in 1 in which there was no ascites, and in which the blood proteins were slightly subnormal; 1 case was classical, with low blood serum proteins; 1 was definitely that of a patient with heart disease, with no ascites.

Prothrombin time was done in 14 cases, in 6 of which it was prolonged, and in 8 of which it was normal. There was no correlation of prolonged prothrombin time with the icterus index.

The galactose tolerance test, calculated on the urinary output after the oral ingestion of 40 Gm. of galactose, was done in 12 cases. It was normal in 11 and abnormal in 1. This one patient, whose liver was enlarged, got along well on a high protein diet, and the serum proteins were normal one year later; thereafter the patient failed to respond to follow-up requests.

Bromsulfalein excretion was done in 18 cases of which there was an abnormal retention in 11, and in 7 cases there was a normal clearance. The dose of 5 mg. per kilogram and the 30 minute intervals were used in the method. The quantitative estimations were

made with a fixed laboratory standard of 100 per cent rather than with the patient's own blood taken immediately after injection and mixed as the 100 per cent.

Alkaline phosphate tests were done four times and found elevated once only in a typical case of cirrhosis with jaundice.

BLOOD SERUM PROTEINS

Blood serum proteins and the albumin and globulin fractions were determined in 29 cases, and omitted in 3. The total blood proteins were above 5.5 Gm. per 100 cc. in 11 cases, below 5.5 Gm. per 100 cc. in 11 cases. They were increased following treatment in 5 cases, and decreased following treatment in 2 cases.

Blood serum albumin was below 3.5 Gm. per 100 cc. in 26, and above 3.5 Gm. per 100 cc. in 1 case. This case showed no ascites, no jaundice, normal cholesterol, normal bromsulfalein, and normal prothrombin levels. The patient had been drinking heavily for a week, and had an enlarged liver. Blood serum albumin had increased from below the edema level to above it in 4 cases. Serum albumin decreased in 1 case, a chronic alcoholic with hematemesis, jaundice, and ascites.

The serum albumin was found to be low in 23 cases with ascites and in 3 that presented no ascites; 3 had low proteins. Of 3 other cases without ascites; 2 had been diagnosed at laparotomy and no blood protein determinations were made. In the 1 remaining case an unsupported clinical diagnosis of cirrhosis was probably wrong.

The serum globulin was below 1.8 Gm. per 100 cc. in 3 cases, above 2.7 Gm. per 100 cc. in 12 cases, and between 1.8 and 2.6 Gm. per 100 cc. in 10 cases. A change from normal to a high level in treatment was made in 3 cases, from a high level to a low level after treatment in 1 case. The total number of cases in which abnormal serum globulin appeared was 19, and in 10 cases the levels were normal between 1.8 and 2.6 Gm. per 100 cc.

Blood plasma protein, particularly serum albumin, was thus the one constituent that was practically always altered in the presence of liver disease in patients who had partaken low protein diets and much alcohol. It was the one fraction also that rose to normal under good treatment of early fatty cirrhosis with high protein diet containing yeast that was rich in thioamino acids, methionine, and choline.

Hippuric acid test was done in 3 cases, all of which showed abnormal results, but the technical accuracy of the method was doubtful.

Cholesterol levels in the blood were determined in 17 cases and was found over 180 mg. per 100 cc. in 7 cases; between 180 and 150 mg. per 100 cc. in 3 cases; and below 150 mg. per 100 cc. in 7 cases.

Cholesterol and cholesterol esters both were determined in only a few cases and generally the percentage of esters was below 45 per cent.

CASE REPORTS

CASE 1.—*Beer Drinker with Hepatomegaly and Ascites.*—H. P., a 38-year-old, chronic alcoholic, white male, had been in the hospital three times for disturbances incident to alcoholism. He claimed to drink mostly beer, but had drunk as much as he could secure for many years.

He was first hospitalized on August 24, 1942, for polyneuritis of rather abrupt onset. He showed no gross clinical sign of liver disease at that time, though no liver function tests were done. He gradually improved on the routine house diet and large doses of vitamins. After five months he was able to go home.

His second hospitalization, February 21, 1944, until March 15, 1944, was for jaundice and edema. He complained that his appetite had been very poor for two weeks. One week before admission he had noticed that his eyes were yellow, his urine was dark, and his stools were light gray in color. Four days before admission his ankles had started to swell.

On examination his jaundice was found to be pronounced and he had dependent edema extending to the sacrum. The liver was enlarged to 8 cm. below the costal margin. The abdomen was distended and showed increased venous pattern; there was a suggestion of ascites, but there was no general agreement among examiners as to whether or not fluid was actually present. The heart and lungs were normal. A blood serological test for syphilis was negative.

His urine at first contained bilirubin and no urobilinogen, but then urobilinogen appeared. The urine was normal on discharge. Stools consistently showed small amounts of urobilinogen.

Icterus indices on various dates were as follows: February 22—112; February 23—125; February 26—100; February 29—72; March 3—32; March 6—44; March 8—44.

A direct van den Bergh test February 23 yielded 18 mg. per 100 cc.

Tests for blood serum proteins gave the following results: On February 22 total blood proteins amounted to 4.4 Gm. per 100 cc., albumin 2.3 Gm. per 100 cc., globulin 2.1 Gm. per 100 cc.; on March 3, total proteins amounted to 5.3 Gm. per 100 cc., albumin 2.7 Gm. per 100 cc., and globulin 2.6 Gm. per 100 cc.

The prothrombin time was 55 seconds, control 75 seconds.

The weight of the patient on February 27 was 174.5 pounds; on March 13 it was 168 pounds.

The patient was put on a high carbohydrate and high protein diet with large doses of vitamins. The liver gradually receded, the abdomen became less distended, and the ankle edema disappeared. His jaundice fell progressively, but he was still jaundiced on discharge after three weeks of treatment. He promised never to touch another drop of liquor and was sent home after four weeks of treatment with instructions to continue on the high carbohydrate and protein diet.

His third hospitalization was from November 25, 1944, to January 11, 1945. He stated that he had abstained for three months and then had gone on another drinking spree. He had been found unconscious, lying in the street. He showed poor memory and confabulated occasionally. As near as could be determined his ankles had begun to swell two weeks

previously, shortly after he had started drinking. He had noticed greatly increased abdominal protuberance for a week.

The physical examination revealed the abnormal findings previously recorded with conspicuous hepatomegaly but now unquestionable ascites and edema of the legs.

He was first given a salt free diet with all the distilled water he wanted, but this regime had no effect. He was given salyrgan twice: once intravenously on November 27 with fair response, and once intraperitoneally on November 29 with no response.

On December 6 he was given a high protein, high carbohydrate diet augmented by 6 Gm. powdered brewers' yeast with high choline content and six tablespoonfuls of calcium caseinate in 200 cc. milk four times a day. On December 9 and 10 he had a spontaneous diuresis of 8,800 cc. with intake of 4,300 cc. Improvement was noted in all of his symptoms and the abnormal signs began to decrease. The total blood plasma proteins and especially the serum albumin showed a conspicuous and gratifying rise to normal. The ascites and edema disappeared and the liver receded.

Tests for blood plasma proteins gave results as shown in table 1.

TABLE 1.—*Results of Blood Plasma Protein Tests, Case 1.*

Date 1944	Total Proteins Gm. per 100 cc.	Albumin Gm. per 100 cc.	Globulin Gm. per 100 cc.
November 25	5.3	1.3	4.0
December 13	6.5	2.0	4.5
December 30	8.0	4.4	3.6

(Note: that the rise was limited to albumin.)

Cholesterol and cholesterol ester studies were not recorded.

Icterus indices were as follows: November 29—16.8; December 15—17.7; January 2—15.0.

A hippuric acid test December 15 was negative.

The patient was seen five months later and appeared to be in excellent condition; he should be brought back for blood chemistry studies.

CASE 2.—*Whisky Drinker with Enlarged Liver, Ascites, and Edema.*—O. P., 48 years old, a chronic alcoholic, white male, had had four admissions for disorders due to alcoholism. He admitted drinking a pint of whisky every two days for years. Two years before being seen by us he had had pneumonia followed by empyema, necessitating drainage. Intercostal neuralgia required section of an intercostal nerve a year later. Three months later he was hospitalized for a toxic psychosis apparently associated with chronic alcoholism.

His first hospitalization, dating from May 13, 1942, until June 6, 1942, was for chills and jaundice. He reported a one-month history of chilly sensations every two days. The chills disappeared after he dosed himself with proprietary antimalarial preparations, but for three days before admission he had noticed that he was jaundiced. His abdomen had felt bloated for five days.

On physical examination the liver was found enlarged, extending downward from two to three fingers' breadth below the right costal margin. There was no ascites. The laboratory findings were corroborative of liver disease. The heart and lungs were normal.

Icterus indices over a period of time dropped rather consistently: May 14—93; May 18—60; May 19—30; May 21—35; May 23—30; May 26—33; May 28—24; May 30—27; June 6—50.

Direct van den Bergh tests on various dates were as follows: May 14—8 mg. per 100 cc.; May 18—5.2 mg. per 100 cc.; May 19—4.4 mg. per 100 cc.; June 4—0.29 mg. per 100 cc.

A blood plasma protein test May 14 yielded 5.82 Gm. total proteins per 100 cc.; 2.86 Gm. albumin per 100 cc., and 2.96 Gm. globulin per 100 cc.

The prothrombin time was 60 seconds, control 38 seconds.

The patient's illness was diagnosed as catarrhal jaundice, and he was given nonspecific therapy and diet as tolerated. After thirty-one days the liver had receded and there was no visible jaundice. A last icterus index of 50 did not agree with his clinical appearance or with the serum van den Bergh result of 0.29 mg. per 100 cc. and must have been wrong.

His second hospitalization, which lasted from September 20, 1943, until October 5, 1943, was for ascites and edema. He complained that for five weeks he had had diffuse soreness in the upper abdomen and that his abdomen, feet, and ankles had been swollen.

Examination confirmed the complaints and demonstrated enlargement of the liver, considerable ascites, and extensive edema of feet and legs. His blood serum protein totaled 6.1 Gm. per 100 cc., with albumin 3.4 Gm. per 100 cc. and globulin 2.7 Gm. per 100 cc. Very little laboratory work was done.

He was treated with a salt free diet and four brewers' yeast tablets three times a day. The ascites and edema slowly subsided. He was dismissed and got along well for five weeks, when his symptoms gradually returned.

His third hospitalization extended from December 27, 1943, until January 6, 1944, and was for edema with the same complaints and physical findings as presented on the second admission. The blood serum proteins totaled 7.0 Gm. per 100 cc., but with low serum albumin, 2.5 Gm. per 100 cc., and globulin, 4.5 Gm. per 100 cc. There were no progress notes and his condition on discharge was not determined or described.

His fourth stay in the hospital was from March 5, 1945, until March 21, 1945, because of gradual recurrence of symptoms. There was again enlargement of the liver, some fluid in the abdomen, and dependent edema.

The icterus index on this admission was 16.

Blood serum protein tests gave the results shown in table 2.

TABLE 2.—*Results of Blood Serum Protein Tests, Case 2.*

Date 1945	Total Proteins Gm. per 100 cc.	Albumin Gm. per 100 cc.	Globulin Gm. per 100 cc.
March 6	2.2	1.38	0.82
March 9	3.93	2.21	1.72
March 16	4.6	2.3	2.3
March 16	5.25	2.41	2.84
March 19	5.04	2.55	2.49

A bromsulfalein test March 7 showed 90 per cent retention after five minutes, 60 per cent after thirty minutes. On March 21, the retention after five minutes was 100 per cent, after thirty minutes 15 per cent.

A galactose tolerance test March 8 yielded 2.04 Gm. in the urine.

On March 12 a cholesterol test showed 172 mg. per 100 cc., esters 69 mg.; on March 19, cholesterol 167 mg. per 100 cc., esters 63 mg.

On March 6 a high protein, high carbohydrate diet was instituted, augmented with 50 Gm. of "Amigen" and 6 Gm. of powdered brewers' yeast of high choline content with each of his three major meals.

Progress notes gave no information on the patient's course in the hospital. He was seen a week after discharge, in the out patient department, and was asymptomatic.

CASE 3.—*Whisky Drinker with Hepatomegaly and Ascites.*—H. B. O. was first hospitalized March 13, 1943, to April 10, 1943. He complained of swelling

and pain in the abdomen, jaundice, and shortness of breath. He had had some palpitation, shortness of breath, and some edema for a short time in 1941. About March 1, 1943, after a period of hard drinking, he noticed the sudden development of abdominal swelling and pain, diarrhea with blood in his stools, nausea, vomiting, loss of appetite, and intense thirst. He admitted that he had been a periodic drinker of whisky up to two or three quarts per week.

Physical examination showed obesity, a florid facies, icterus of the sclerae, and a hemorrhage in the conjunctiva. The heart was within the normal limits of size; the rate was rapid, 100 to 110 beats per minute. A slight blowing systolic murmur was heard at the apex. The blood pressure was 114/78. The abdomen was very protuberant, generally tender, measured 43 inches in circumference with definite bulging and dullness in the flanks, shifting dullness and a fluid wave. The liver was enlarged and palpable.

Laboratory studies revealed leukocytosis, macrocytosis, and stippling. Anemia developed under observation. On March 14 acitic fluid was a definite transudate with specific gravity 1.010, serum bilirubin 11 mg. per 100 cc., phosphatase 3.10 units per 100 cc. Icterus indices on various dates were as follows: March 14—34; March 18—57; March 25—25; March 31—50; April 17—25. Blood plasma total proteins on March 19 were 4.5 Gm. per 100 cc., albumin was 2.5 Gm. per 100 cc., and globulin was 2.0 Gm. per 100 cc. On March 19, nonprotein nitrogen in the blood amounted to 22 mg. per 100 cc., urea nitrogen to 17.6 mg. On March 25, plasma proteins totaled 4.5 Gm. per 100 cc., albumin 2.7 Gm. per 100 cc., globulin 1.8 Gm. per 100 cc. A galactose tolerance test was negative, 1.53 Gm. excretion in four hours. A cephalin cholesterol flocculation was positive.

Tenderness of the abdomen, jaundice, and ascites gradually cleared on a high protein, high carbohydrate, low fat diet with multiple vitamins, particularly brewers' yeast and vitamin B complex, including thiamin.

The patient's second hospitalization, from May 2, 1944, to May 19, 1944, was for anorexia, continuous dull pain in the abdomen, and vomiting eight to ten times a day with occasionally some blood in the vomitus. During the previous year he had consumed much beer. The physical findings were as they had been previously. His facies were red. He was obese. His blood pressure was 170/100, quite considerably elevated above the level recorded in March, 1941. Fundi showed silver wire arteries indenting the veins in slight arteriovenous nicking. No icterus of the skin and no hemorrhages appeared. The abdomen was tense, protuberant, bulging in the flanks. The liver was palpable by ballottement, a hand's breadth below the right costal margin; shifting dullness and fluid waves were elicited.

Andresen's gelatin diet was initiated, then Sippy's, then a high protein diet cocktail of 15 Gm. brewers' yeast three times a day. Laboratory studies revealed that the patient's urine contained excess urobilinogen, albumin, and erythrocytes. His icterus index was 18. A routine blood study gave the following results: hemoglobin 91 per cent or 14.2 Gm. per 100 cc., red blood cells 4,540,000, leukocytes 6,400, differential polymorphonuclears 48, lymphocytes 49, monocytic macrocytes, prothrombin counting time 55 seconds. Blood chemistry studies showed nonprotein nitrogen 31.8 mg. per 100 cc., urea nitrogen 9.2 mg. per 100 cc., total plasma protein 6.5 Gm. per 100 cc., albumin 4.0 Gm. per 100 cc., globulin 1.5 Gm. per 100 cc. In a galactose test 2 Gm. were excreted in four hours. A bromsulfalein test revealed only a trace retained after thirty minutes. On the dietary regime the hematemesis stopped and ascites receded.

The third hospitalization was from June 11, 1945, to July 6, 1945. After three weeks of heavy drinking by the patient, his abdomen became enlarged and painful and he had much retching and vomiting, diplopia, and visual, auditory, and other sensory hallucinations of "burning up." Physical examination revealed a tremor, and florid and bloated facies. He was more obese and rotund, weighed 207 pounds, and measured 67 inches in height. Previously he had weighed 200 and 185 pounds. The heart action was rapid, 120 per minute; the rhythm was irregular. The blood pressure was 194/98 in both arms. The heart was at the upper limit of normal or slightly enlarged. The aortic second sound was abnormal. A soft systolic murmur was heard over the mitral area. The abdomen was large, distended, bulging in the flanks, and the wall was tense. The veins were noticeably enlarged over the abdomen. The liver was enlarged, extending 9 to 11 cm. below the costal margin, and was tender. The liver dullness extended up to the sixth rib. Shifting dullness and fluid wave were demonstrable.

The laboratory studies revealed that the urine contained albumin and a few coarsely granular casts. Routine blood study showed no anemia, hemoglobin 88 per cent or 14 Gm. per 100 cc., slight leukocytosis, white blood cells 10,100, about 71 segmented and 18 stab forms, and 9 lymphocytes. The Kline serological test was negative. The patient's icterus index was 21. The galactose tolerance was normal, with about 0.8 Gm. excreted in four hours. A bromsulfalein test showed abnormal retention of 30 per cent in thirty minutes.

He was given a high carbohydrate, high protein, low fat diet (100 protein, 400 carbohydrates—3,000 calories) with four brewers' yeast tablets three times a day. The patient could not take "Amigen," which was prescribed for oral administration. He was given 1 Gm. of choline chloride three times daily from June 12.

Other tests yielded the results listed in table 3.

TABLE 3.—*Results of Blood Plasma Protein, Cholesterol, Cholesterol Ester, and Icterus Index Tests, Case 3.*

Date 1945	Total Proteins Gm. per 100 cc.	Albumin Gm. per 100 cc.	Globulin Gm. per 100 cc.	Cholesterol mg. per 100 cc.	Cholesterol Esters mg. per 100 cc.	Icterus Index
June 9	5.67	3.45	2.22	230	89	16
June 12	5.50	2.54	2.96	222	93	21
June 16	6.17	3.78	2.41			12
July 9	6.70	4.00	2.70	167	75	

CASE 4.—*Beer Drinker with Hepatomegaly and Hyperlipemia.*— G. P. M. was first treated in the Out Clinic on April 18, 1941, for nervousness, exhaustion, and loss of appetite. He had consumed great quantities of alcoholic beverages, especially beer, as a sedative for his nervousness. From 1926 to 1930, he got drunk every week. From 1930 to 1934 he drank two to three pints of whisky a week. He abstained for a while. After 1934, working as accountant for a brewing company, he averaged about eight bottles of beer a day until 1939, when he increased to the ten bottles drunk daily until his hospitalization on May 9, 1945. His appetite began dropping off. He gave up breakfast, ate a plate lunch at a restaurant, but insisted that he took some meat each day except when he remained drunk for days in succession.

He had a chancre of the lip in 1937. He took twenty injections of neoarsphenamine and twenty injections of bismuth. He had had prostatitis for years and a nervous breakdown in 1934, for which he was hospitalized for six months. Physical examination showed evidence of chronic alcoholism, a

bloated red facies, nervousness, and tremors of his muscles. Blood pressure was 164/100 and the pulse was 80. His abdomen was normal. The liver was felt. The extremities showed exaggerated reflexes. He was given some sedatives and advised to quit drinking and start eating a good diet.

The patient returned to the hospital on May 9, 1945, again complaining of anorexia, nausea in the morning, vomiting, insomnia, hoarseness, chronic cough, a loss of 10 pounds of weight, and nervousness.

Physical examination showed icterus of the sclerae. The heart and lungs were normal. The blood pressure was 130/88. The abdomen was preternaturally full. The liver was enlarged and extended 7 cm. below the costal border. Reflexes in the extremities were hyperactive.

Laboratory studies revealed a normal urine. Complete blood study revealed hemoglobin 50 per cent or 8 Gm. per 100 cc., red blood cells 2,870,000, white blood cells 5,300, with polymorphonuclears 44 and lymphocytes 45.

Urobilinogen and galactose tests were questionably positive. A bromsulfalein test showed 20 per cent retention at the end of thirty minutes.

On May 10 the blood plasma protein total was 5.37 Gm. per 100 cc., albumin was 2.32 Gm. per 100 cc., globulin 3.05 Gm. per 100 cc., cholesterol 571 mg. per 100 cc., cholesterol esters 250 mg. per 100 cc., nonprotein nitrogen 33.2 mg. per 100 cc., urea nitrogen 16.5 mg. per 100 cc., glucose 91 mg. per 100 cc. On May 17, choline chloride in doses of 1 Gm. three times a day was started. The total blood plasma proteins increased to 6.16 Gm. per 100 cc., with albumin 3.04 Gm. per 100 cc. and globulin 3.12 Gm. per 100 cc. On May 25 cholesterol was 400 mg. per 100 cc., cholesterol esters 100 mg. per 100 cc.

The patient had had no alcoholic beverage since May 9, and he was discharged from the hospital in good condition May 25. He promised to abstain from drinking.

By June 11 the blood plasma protein total was 6.16 Gm. per 100 cc., albumin 3.76 Gm. per 100 cc., globulin 2.98 Gm. per 100 cc., nonprotein nitrogen 35.9 mg. per 100 cc., urea nitrogen 18.0 mg. per 100 cc., glucose 100 mg. per 100 cc., cholesterol 333 mg. per 100 cc., cholesterol esters 156 mg. per 100 cc.

On July 9 the total blood plasma protein had increased to 6.30 Gm. per 100 cc. with albumin 3.50 Gm. per 100 cc., globulin 2.80 Gm. per 100 cc., nonprotein nitrogen 37.2 mg. per 100 cc., urea nitrogen 18.0 mg. per 100 cc., glucose 95 mg. per 100 cc., cholesterol 308 mg. per 100 cc., and cholesterol esters 106 mg. per 100 cc.

A roentgenogram of the left shoulder, made July 10, showed a large osteochondroma 2 by 4 cm. on the medial aspect of the humerus. No more choline chloride was available after July 9 until August 24. The liver edge could not be felt but the liver dullness extended 2 cm. below the costal margin.

The patient returned August 24, 1945, complaining of anorexia and nervousness. He had started to drink beer again August 15 and increased from ten to fifteen bottles a day for five days and then quit, five days later reporting for blood chemistry studies and more choline therapy.

On August 24 the blood plasma protein total was 6.61 Gm. per 100 cc., albumin 3.61 Gm. per 100 cc., globulin 3.00 Gm. per 100 cc., cholesterol 308 mg. per 100 cc., cholesterol esters 115 mg. per 100 cc., nonprotein nitrogen 32 mg. per 100 cc., urea nitrogen 17 mg. per 100 cc., glucose 91 mg. per 100 cc.

Case 5.—*Enlarged Liver of Congestive Failure.*—M. M., 54-year-old white housewife, was hospitalized from June 29, 1945, to July 15, 1945. She complained of shortness of breath, weakness, and pain in the right upper abdomen. Symptoms were first noticed on exertion in the autumn of 1942 and increased slowly in spite of her taking 1.5 gr. of digitalis daily. On June 5, 1945, she had had very severe attacks of dyspnea after she had eaten dinner. After this, fullness in her abdomen was most disturbing. She lost her appetite, had nausea, and vomiting, and her weight dropped from 180 to 130 pounds. In her past history she had had an attack of rheumatism seventeen years previously, in 1925, when she was 34 years old. Her tonsils were removed following the attack. She denied having any joint trouble before or after this illness.

Physical examination showed a middle aged white woman, definitely cyanotic, apparently in distress with abdominal distention. Lymph glands were palpable, particularly at the angles of the jaw. The heart was greatly enlarged. The apex impulse was in the axillary line. There was a definite long systolic thrill in the aortic area and a long, loud, rough aortic systolic and a high pitched diastolic murmur. Gallop rhythm was heard over the precordium. The pulmonary second sound was considerably accentuated. The abdomen was protuberant, particularly in the right upper quadrant; a hard, yet tender mass extended 4 cm. below the costal margin. This tumor had been felt by the patient and she was certain that it was cancer of the stomach. It was an engorged, enlarged liver of congestive failure secondary to chronic rheumatic aortic vascular disease. An electrocardiogram showed a complete left bundle branch block to account for the gallop.

Blood plasma proteins totaled 5.53 Gm. per 100 cc., with albumin 3.37 Gm. per 100 cc., globulin 2.16 Gm. per 100 cc., nonprotein nitrogen 90 mg. per 100 cc., glucose 175 mg. per 100 cc., cholesterol 286 mg. per 100 cc., cholesterol esters 103 mg. per 100 cc. Digitalis was continued.

Case 6.—*Chronic Passive Engorged Liver.*—W. A., 60-year-old laborer, presented himself January 24, 1945, complaining of pain in the upper abdomen and shortness of breath. He was hospitalized the first time from January 25 to February 20, 1945, the second time March 16 to April 30, 1945, and the third time July 6 to July 20, 1945. He always had the same symptoms, about the same as those which had first developed in the early part of 1944. He had responded each time to rest, digitalis, and diuretics.

Physical examination showed a hypertension with blood pressure from 210/150 down to 180/132. The neck veins were engorged. The aortic and cardiac dullness were increased, with the apex impulse extending out in the sixth interspace to the mid axillary line. Premature ventricular contractions were heard. The aortic second sound was loudly accentuated, and an aortic systolic murmur and gallop rhythm were heard over the precordium. Systolic, peripheral arteries were sterile. Alternation of the pulse was noticed. Pulse blood pressure was 167/115. The abdomen was rounded and prominent, tender in the right upper quadrant, with liver dullness extending down to the umbilicus, and bulging in the flank, with shifting dullness and fluid wave. Edema of the legs extended up to the sacrum, and of the arm to the elbow. Funduscopic examination showed silver wire retinal arteries and arteriovenous nicking. Continuation of digitalis with addition of aminophyllin caused the edema to disappear. A slight gallop rhythm and the 4 cm. enlargement of the liver persisted. Choline chloride was given, 1 Gm. three times a day. The gallop rhythm disappeared, and the liver receded promptly to the costal margin.

On July 17, the blood plasma proteins totaled 5.90 Gm. per 100 cc., albumin 2.60 Gm. per 100 cc., globulin 3.30 Gm. per 100 cc., nonprotein nitrogen 47 mg. per 100 cc., cholesterol 200 mg. per 100 cc., cholesterol esters 105 mg. per 100 cc. A bromsulfalein test showed 30 per cent retention after thirty minutes.

On July 19, 1945, blood plasma protein totaled 7.39 Gm. per 100 cc., with albumin 3.75 Gm. per 100

cc. and globulin 3.64 Gm. per 100 cc., cholesterol 260 mg. per 100 cc., cholesterol esters 105 mg. per 100 cc. The prothrombin time was 48 seconds, control 40 seconds. Bromsulfalein retention was 15 per cent in thirty minutes.

An electrocardiogram showed definite evidence of myocardial damage. There was negativity in T_1 and T_2.

Comment.—Prompt disappearance of the gallop rhythm, recession of the liver, rise of blood serum albumin to normal, and decreased cholesterol under the influence of choline are significant.

SUMMARY

The newer conceptions of the biochemical mechanisms involved in liver damage are presented. Types of reversible fatty liver disease are discussed and experimental data on the chemical means of accomplishing lipolysis with proteins and amino acids are presented.

A statistical study of 32 acceptable cases of cirrhosis of the liver studied in the John Sealy Hospital and presenting satisfactory diagnostic criteria, including liver function tests, are given. A low serum albumin seemed to be the most reliable single sign of liver disease.

Six clinical cases are presented in some detail. Liver damage in 4 of the patients proved reversible. The enlarged livers were caused by alcoholic dietary deficiency, and probably fatty metamorphosis; 2 of the patients showed spectacular response to high protein diets supplemented with casein hydralysates and brewers' yeast of high choline content.

Four patients likewise responded conspicuously to the addition of choline chloride to the diet. Only 2 of these 4 cases are reported here since the 2 others which showed striking clinical improvement had incomplete laboratory studies.

Two cases of chronic cirrhosis of the liver with shrunken hobnailed livers and ascites failed to show any response whatsoever to choline chloride administration.

Two patients with chronically engorged and anoxic livers of congestive heart failure, with possibly some fatty changes, showed striking reduction in the liver and general improvement following the administration of choline chloride in addition to the other supportive drugs. The choline chloride may not only act as a lipotrophic substance in these cases, but may also contribute to improve myocardial efficiency, as the conspicuous gallop rhythm was observed to disappear as edema in the patients without bundle branch block, and liver engorgement rapidly cleared following two days of choline chloride ingestion.

Experimental studies on the effects of choline on the cholesterol content of the aorta, heart, and liver of aged hens suggests that choline mobilizes cholesterol from the aorta and changes it to phospholipids.

Enlarged fatty livers due to anemia and toxemia, as well as alcohol, diabetes, congestive failure, or carbon tetrachloride poisoning, are likely to respond to choline*, methionine, betaine, inositol, or lipocaic.

REFERENCES

1. Beattie, J., Herbert, P. H., Wechtel, C., and Steele, C. W.: Studies on Hepatic Dysfunction;Carbon Tetrachloride Poisoning Treated with Casein Digest and Methionine, Brit. M. J. 1:209-211 (Feb. 12) 1944; Beattie, J., and Marshall, J.: Studies on Hepatic Dysfunction; Value of Sulphur-Containing Amino Acids and Casein Digest in Prevention of Post-Arsphenamine Jaundice, Brit. M. J. 2:651-655 (Nov. 18) 1944.

2. Beard, H. H.: Creatine and Creatinine Metabolism, Brooklyn, The Chemical Publishing Company, 1943.

3. Best, C. H., and Ridout, J. H.: Pancreas and Deposition of Fat in Liver, Am. J. Physiol. 122:67-72 (April) 1938.

4. Broun, G. O.: Medical Diseases of the Liver, Bull. St. Louis M. Soc. 39:403 (May) 1945.

5. Chaikoff, I. L., and Kaplan, A.: Influence of Indigestion of Raw Pancreas upon Blood Lipids of Completely Depancreatized Dogs Maintained with Insulin, J. Biol. Chem. 112:155-165 (Dec.) 1935.

6. Chavez, I., Supelveda B., and Ortega, I. A.: Functional Value of Liver in Heart Disease; Experimental Study, J. A. M. A. 121:1276-1282 (April 17) 1943.

7. Dimitry, T. J., and Beard, H. H.: Story of Choline Chloride in Relation to Clinical Medicine with Special Reference to Urology and Dermatology, Urol. & Cutan. Rev. 49:91-97 (Feb.) 1945.

8. Dragstedt, L. R., and others: Relation of Lipocaic to Blood and Liver Lipids of Depancreatized Dogs, Am. J. Physiol. 127: 755-760 (Nov.) 1939.

9. Du Vigneaud, V., and others: Relationship between Nature of Vitamin B Complex Supplement and Ability of Homocystine to Replace Methionine, J. Biol. Chem. 130:325-340 (Sept.) 1939; Effect of Choline on Ability of Homocystine to Replace Methionine in Diet, ibid. 131:57-76 (Nov.) 1939; Transfer of Methyl Group from Methionine to Choline and Creatine, ibid. 134:787-788 (July) 1940; Inability of Creatine and Creatinine to Enter into Transmethylation in Vivo. ibid. 139:917-923 (June) 1941; Transmethylation as a Metabolic Process in Man, ibid. 146:685-686 (Dec.) 1942.

10. Entenman, C., and Chaikoff, I. L.: Is Choline the Factor in Pancreas that Prevents Fatty Livers in Depancreatized Dogs Maintained with Insulin? J. Biol. Chem. 138:477-485 (April) 1941.

11. Entenman, C., Chaikoff, I. L., and Montgomery, M. L.: Blood Lipids of Dogs Subjected to Ligation of External Pancreatic Ducts, J. Biol. Chem. 130:121-132 (Sept.) 1939; Effect of Choline on Blood and Liver Lipids of Dog Subjected to Ligation of Pancreatic Ducts, ibid. 135:329-335 (Aug.) 1940.

12. Fagin, I. D., Sahyun, M., and Pagel, R. W.: Cirrhosis of Liver; Lipotropic Action of Parenterally Administered Amino Acids, J. Lab. & Clin. Med. 28:987-993 (May) 1943.

13. Friedlander, H. D., Chaikoff, I. L., and Entenman, C.: Effect of Ingested Choline on the Turnover of Plasma Phopholipids, J. Biol. Chem. 158:231-238 (Jan.) 1945.

14. Garvin, C. F.: Cardiac Cirrhosis, Am. J. M. Sc. 205:515-518 (April) 1943.

15. György, P., and Goldblatt, H.: Hepatic Injury on Nutritional Basis in Rats, J. Exper. Med. 70:185-192 (Aug.) 1939; Choline as Member of Vitamin B_2 Complex, ibid. 72:1-10 (July) 1940; Observations on Conditions of Dietary Hepatic Injury (Necrosis, Cirrhosis) in Rats, ibid. 75:355-368 (April) 1942.

16. Himsworth, H. P., and Glynn, L. E.: Toxipathic and Trophopathic Hepatitis, Lancet. 1:457-461 (April 8) 1944.

17. Lillie, R. D., and others: Histogenesis and Repair of the Hepatic Cirrhosis of Rats Produced on Low Protein Diets and Preventable with Choline, Pub. Health Rep. 57:502-508 (April 3) 1942.

18. McHenry, E. W., and Patterson, J. M.: Lipotropic Factors, Am. Physiol. Rev. 24:128-167 (Jan.) 1944.

19. Miller, L. L., and Whipple, G. H.: Chloroform Liver Injury Increases as Protein Stores Decrease; Studies in Nitrogen Metabolism in these Dogs, Am. J. M. Sc. 199:204-216 (Feb.) 1940.

20. Patek, A. J., Jr., and Post, J.: Treatment of Cirrhosis of Liver by Nutritious Diet and Supplement Rich in Vitamin B Complex, J. Clin. Investigation 20:481-505 (Sept.) 1941.

21. Tucker, H. F., and Eckstein, H. C.: Effects of Supplementary Methionine and Cystine on Production of Fatty Livers by Diet, J. Biol. Chem. 121:479-484 (Nov.) 1937.

22. Welch, A. D.: The Preparation of a Casein Hydrolysate for Study of the Relationship between Choline and Homocystine, J. Biol. Chem. 137:173-181 (Jan.) 1941.

23. Wolffe, J. B., and others: Pancreatic Hormone (Insulin Free) in Cardiovascular Disease, J. M. Soc. New Jersey 35:170 (March) 1938, and Desympatone—A Fraction of Insulin-Free Pancreatic Extract, Summaries of Communications, Moscow, Leningrad, State Publishing House for Biol. and Med. Lit., 1935, p. 436, also published in Proc. XVth Internat. Physiol. Congress, August, 1935, Sechenov J. Physiol. U. S. S. R. 21:266 (State Biol. and Med. Press) 1938; cited in Present Status of Lipocaic, Preliminary Report of Council on Pharmacy and Chemistry, J. A. M. A. 115:1454-1455 (Oct. 26) 1940.

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A REPORT ON 100 CASES OF RHEUMATIC FEVER IN YOUNG ADULTS*

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The foundation of the Rheumatic Fever Control Program of the Army is based on the theory of the relationship of the beta hemolytic streptococcus infection to the rheumatic process. The plan of this program is as follows: five hospitals have been chosen for the care and treatment of rheumatic fever patients. These hospitals were selected because of their location in areas low in the incidence of rheumatic fever. These selections were made after careful analysis of throat cultures of the permanent party personnel and the incoming troops to these areas, and cultures were compared with hospitals over a wide area. Those hospitals located in areas having the lowest incidence of beta hemolytic streptococci were then appointed for the receiving and disposition of these patients. Patients who develop rheumatic fever are transferred to these hospitals as soon as transportation is advisable, this being recommended within the first two weeks of the illness. Appropriate treatment is then instituted and the patient is maintained in the hospital in a low incidence area for a period of six months. During this period of six months he receives convalescent training, training in an occupational specialty and ultimately is reassigned for a second six months to an area low in the incidence of rheumatic fever which, according to the Army Regulations, is an area below the 34th parallel. At the end of this second six months time the patients are re-examined and if the presence of cardiac residual or other residual of rheumatic fever is discovered, appropriate disposition is made.

EPIDEMIOLOGY OF RHEUMATIC FEVER

Haig-Brown[7] in 1886 first recognized the sympton-free interval between tonsillitis and the onset of acute rheumatism. Since that time, numerous observers have pointed out and confirmed the close relationship between mild pharyngitis, usually caused by the hemolytic streptococcus, and the ultimate development of the rheumatic process.[5, 10] It is with this in mind that we discuss Phase 1, which is the period of the acute upper respiratory tract infection lasting for only a few days and which may be considered the period of invasion. Phase 2 is a symptom-free interval which usually lasts from ten to eighteen days and may be considered as a period of developing sensitivity. Phase 3 is characterized by the onset of joint symptoms and carditis or the period of tissue sensitivity.[1] This conception of the relationship between beta hemolytic streptococci and the activation of the rheumatic process is essential both to an understanding of the rheumatic problem and also to the care of the rheumatic subject.

An acceptance of this association is also necessary in the prevention of rheumatic fever and the elimination of streptococcal epidemics. There are certain factors in Army training camps which are conducive to the spread of the hemolytic streptococcus which are not operative in civilian practice. These are, first, the susceptibility of the host to infection with beta hemolytic streptococcus, second the changing character of the population and third, the intermittent period of overcrowding. At the present time with the crowding of our urban centers and with crowded condition of the schools, these same factors may influence the spread of streptococcal epidemics in the civilian population and the same epidemiological factors may be operative in the civilian practice as it is now in the Army service.

CRITERIA FOR DIAGNOSIS

A carefully taken history is the first step in the proper diagnosis of rheumatic fever. This should include the familial history of rheumatic infections and heart disease as well as the patient's own past history in regard to streptococcal infections and rheumatic activity.

As arthritis is usually the presenting symptom it is thought that it should be observed primarily in its relationship to a preceding upper respiratory infection and secondly in its response to salicylate. The migratory character and the usual primary involvement of joints of the lower extremity has also been observed. Evidence of carditis was considered of major importance in making the diagnosis. Electrocardiographic changes, pericarditis and the development of a new murmur were accepted as evidence of active carditis. The presence of a rash, subcutaneous nodules, repeated non-traumatic nose-bleed and precordial and abdominal pains are additional evidences of rheumatic fever when associated with some more important criteria. In our opinion the elevated sedimentation rate and the electrocardiogram are the two most important laboratory procedures in the diagnosis of rheumatic fever. A combined history of the acute upper respiratory infection, even though

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mild, with a period of quiescence followed by the development of mild arthralgia associated with an increased sedimentation rate, is a point that bears continued emphasis.

CLINICAL CHARACTERISTICS OF ONE HUNDRED CASES IN ARMY

Twenty-nine of this group of 100 gave a previous history of having had rheumatic fever in childhood. The average age at the time of the observed episode was twenty-three years. Seventy-nine of the patients give the history of having had phase 1, and 13 of the number had had scarlet fever. The duration of phase 2 averaged eighteen days. The seasonal occurrence of rheumatic fever was greater in the spring months, appearing later however than is usually considered the months of maximum occurrence, beginning in March and continuing through July, with 7 cases occurring in August. Pain in a joint of the lower extremity was the initial symptom in the majority of the cases, and in 84 cases of this group the joint pains were migratory, while in the remaining 16 they were confined to one joint. The joint symptoms were as a rule mild and caused the patient to present himself to sick call only because the joint swelling interfered with his participating in the organized physical training program. As a result of the extreme mildness of the arthralgia, the patient was not infrequently sent to the hospital with the diagnosis of flat feet, or sprained ankle and only the findings of electrocardiographic abnormalities and the persistence of the elevated sedimentation rate led to the diagnosis of active rheumatic fever. In 90 per cent of the cases admitted to the hospital with rheumatic fever, fever was present; however, it was not of the height usually considered to be present with rheumatic fever, reaching a height of 102 F. in some cases but usually being not over 99 F. or 99.8 F. Seventy-five per cent of the cases were monocyclic in character, while the remaining 25 per cent showed recurrent episodes of activity. Six of these patients presented themselves with a rash which was diagnosed as erythema multiforme or erythema marginatum. There were no subcutaneous nodules observed in this series of cases.

LABORATORY FINDINGS

As pointed out before, the most important laboratory findings are the elevation of the sedimentation rate and the electrocardiographic changes. These findings should not be the basis for the diagnosis but should be confirmatory evidence for the well taken history. Leukocytosis was present in 74 cases. The average duration of this elevated white count was 4.2 days; the maximum elevation was twelve days, and in several cases it was only elevated at the time of admission. The average white count was 8,900, the maximum being reached at 18,600 in one instance. On several occasions the leukocytosis was not greater than 8,000. We must remember, however, that not infrequently salicylates will lower the leukocyte count by 1,000 cells per cc.

Sedimentation Rate.—The Westergren method was used and in all cases there was some elevation of the sedimentation rate. The average duration of the elevation was 49.6 days, the maximum being 200, and in one occasion it was elevated for only two days. The height of the sedimentation rate averaged 56 mm. per hour and on one occasion was as high as 122 mm. per hour. The lowest was 21 mm.

It is our opinion that the electrocardiogram is the most important laboratory confirmatory aid in making a diagnosis of rheumatic fever. Cohn and Swift[6] analyzed the records of 37 patients with rheumatic fever and found some abnormalities in 95 per cent. The high incidence of electrocardiographic changes is accounted for by the large number of successive electrocardiograms made. In an earlier series of 53 patients who were examined soon after the onset of symptoms, the writer observed an incidence of 86 per cent electrocardiographic abnormalities. In the present series, 63 per cent had electrocardiographic changes. We believe that this is due to the fact that the onset was at widely scattered posts, and that in several instances electrocardiographic tracings were not made until the illness had been active for a period of ten days or two weeks. We believe that had tracings been made daily for one week, beginning as soon as the patient presented himself to the hospital, that the percentage of abnormalities would have been appreciably increased. The most frequent abnormality was a partial heart block as evidenced by a prolongation of the PR interval, and this abnormality appeared in 39 cases. T wave changes were the next most important abnormality. These changes were present not only in the limb leads but in the precordial leads as well. The T wave changes occurred in 11 individuals. QRS changes and ST segmental shifts made up the remainder of the group. These changes were transient and occurred in varying degrees during the course of the acute illness. The average duration of the electrocardiographic changes was 17.8 days, and in one instance electrocardiographic changes persisted for as long as sixty days. It was not infrequent that the electrocardiographic changes occurred for

one day only. It has been our policy to make electrocardiographic tracings immediately that the patient presents himself to sick call and to be continued daily for the first week, and if changes are persisting, electrocardiograms are made bi-weekly throughout his stay in the hospital.

CARE OF THE RHEUMATIC PATIENT

Prophylaxis.—Realizing that those individuals who escape hemolytic streptococcal infection will also escape rheumatic fever,[3] a program of prophylaxis has been instituted. When the incidence of hemolytic streptococcal upper respiratory infection is increasing or when it shows an incidence of epidemic proportion in an area, the individuals in that area are given sulfadiazine prophylaxis. The dose given was gram 1 per day. We also believe that rheumatic subjects are more likely to have a recrudescence of their rheumatic activity following a hemolytic streptococcal invasion, and it has also been our experience that rheumatic subjects do have a greater incidence of throat cultures that are positive for beta hemolytic streptococci than the normal. We have routinely given all of our rheumatic patients gram 1 sulfadiazine per day during the winter months. Up until the present time there have been no recrudescences or recurrences of rheumatic fever among the rheumatic subjects under our care. It has been our experience that the use of sulfonamides after the onset of hemolytic streptococcal upper respiratory infections does not prevent the development of rheumatic fever. Salicylates have been considered as an agent to prevent the development of rheumatic activity following the primary invasion of the hemolytic streptococci. The recommended dosage is 6 grams per day being instituted at the time the known infection is present and being continued for from fourteen to twenty-one days following its onset.[4] The criticism of this type of prophylaxis is that it is possible that phase 3 of rheumatic fever may be masked by the dosage of salicylate given.

Active Therapy.—We believe that as soon as a diagnosis is made that sodium salicylate should be started in dosages that will give a blood salicyl level of at least 375 gamma per cc. It has been our experience that the dosage necessary to maintain this blood level is 40 grains given every six hours orally. If the oral dosage does not maintain an adequate blood salicyl level, then we are justified in giving the patient intravenous salicylate therapy in dosages of 10 grams per 1,000 cc. of saline as outlined by Coburn.[2] Unfortunately we were unable to see all of these patients at the beginning of their illness and in this group there were 32 cases in which salicyl levels were determined and 27 of this number showed a salicyl level of greater than 350. Salicylates were given on the average of 47.9 days. The longest period of time which they were given was 157 days. The average daily dosage for all of these patients was 132 grains daily. The response was good in 71 cases; and that is, the analgesic, antipyretic and antiphlogistic action of salicylates was demonstrated. Response was moderate with 15 and poor in 9. This response in the latter group was in those individuals who were ultimately diagnosed as having rheumatoid arthritis and in those who had severe persistent arthralgia. In experiments done in conjunction with Major P. K. Smith of the School of Aviation Medicine at Randolph Field, the work of Smull and others[9] in regard to the use of sodium bicarbonate was confirmed. It was found in this series of cases that a more adequate blood salicyl level could be reached without the use of sodium bicarbonate and that the excretion of sodium salicylate was more rapid when sodium bicarbonate was used. It is of interest that in all the individuals whose blood salicyl level was maintained at levels greater than 350 gamma, none developed cardiac residual during the period of observation. Complications with the use of salicylates have been rare but infrequently nausea, tinnitus and loss of appetite occur but have not been serious enough to warrant the discontinuance of the drug. In 2 cases, salicyl dyspnea occurred and was accompanied by hallucinations and disorientation. In one instance hematuria was a prominent finding. Three individuals in which tremendouly large dosage of salicylates were given and a salicyl level of greater than 700 was maintained for over a long period of time it was noted that a follicular like rash occurred over the trunk and face and was accompanied by a rather intense itching and subsided with the lowering of the salicyl level.

The question of tonsillectomy is not infrequently raised in the treatment of rheumatic fever. It was observed that 46 of this 100 individuals had had a previous tonsillectomy before the onset of the rheumatic fever symptoms, and in those individuals who had remaining tonsillar tissue, removal was not advised unless evidence of inflammation was present.

Convalescent Activity.—The patient is kept at complete bed rest until the sedimentation rates have been within normal limits and other evidences of activity have been quiescent for a period of two weeks. Salicylates are continued for the first week of

quiescence. Tests are used in evaluating the physical fitness and the classification of these individuals[8] in the convalescent program. An exercise consisting of twelve step-ups in 30 seconds on a bench twelve inches high was the first test used. A sitting pulse of 100 or less one minute after this exercise was considered as passing. If this test was successfully passed the same exercise was repeated on a bench 20 inches high and a pulse of 100 or less one minute after exercise was considered as passing. Patients who have passed both the twelve and the twenty inch bench tests were given ward exercise. Patients assigned to ward exercise received calisthentics arranged according to the amount of energy used. Progressive tests were used which consisted of stepping up and down on a 20 inch bench at the rate of twenty-four steps per minute for as long as the patient could but no longer than five minutes. If the patient showed normal progress on this progressive test he was advanced in his physical training program. During the period of testing sedimentation rate determinations, careful physical examinations and leukocyte counts and electrocardiographic tracings were done. As the patients increased their physical activity, they were transferred from the active rheumatic fever wards to barracks and given privileges similar to those of other enlisted men employed around the hospital. As soon as the patients were physically fit they were assigned to a job in their particular specialty in the army. They work at this job full time, taking calisthenics three hours a week. It is the opinion of all investigators collaborating on this project that the number and the degree of cardiac neuroses has been considerably decreased compared with previous groups of patients and that psychosomatic complaints have been less prominent. After observing this group of individuals in the convalescent program since September, 1944, it is our opinion that no untoward results have resulted from this early activity of the rheumatic fever patient.

FINAL EVALUATION

Ninety-three of these patients have been observed for a sufficiently long period that we believe a satisfactory disposition may be made in their cases. Sixty-two were returned to full military duty, with no demonstrable evidence of residual cardiac disease. Sixteen demonstrated unmistakable evidence of cardiac damage. This was characterized by (1) increased heart size in 2, by both fluoroscopic and x-ray examination and (2) development and persistence of diastolic murmurs in 8. These murmurs were not present at the time of admission to the hospital. Five of these diastolic murmurs were aortic in their location and three were mitral. (3) The remaining 6 developed systolic murmurs which were of sufficient intensity to be considered organic in character. Seven patients are being held for further observation because of questionable residual cardiac disease, and of this group 1 showed persistent electrocardiographic changes in the T wave which have persisted for four months; the remaining 6 had apical systolic murmurs at the time of admission, and it was our opinion that the intensity of these murmurs had increased during their period of rheumatic activity and they are being held for further evaluation before final disposition. There were 4 patients who were received at this station with a primary diagnosis of rheumatic fever but who on further observation were found to have rheumatoid arthritis and were discharged with this diagnosis.

The presence of arthralgia without objective findings has been a problem in the disposition of these patients. Thirty-four of the 100 patients complained of joint pains which were not necessarily located in the joints primarily involved with rheumatic fever and which persisted throughout their period of convalescence. There was no correlation between the persistence of symptoms and the occurrence of frequently positive throat cultures in this group. During their stay they showed no increase in the sedimentation rate and no objective evidence of joint disease. The response to salicylate, physiotherapy and exercise was not satisfactory. It was our opinion that this most likely represented mild residual fibrositis and in some instances psychosomatic complaints. In others it is probable that this represented organic residual from the rheumatic activity.

CONCLUSIONS

1. It is our opinion that rheumatic fever may occur in any area in which infection with beta hemolytic streptococci is present.
2. Acceptance of the relationship of the beta hemolytic streptococcus to rheumatic fever is important in the early recognition and ultimate care of the patient.
3. The electrocardiogram when used early and frequently has been our most important laboratory aid in the diagnosis of rheumatic fever.
4. In our opinion sulfonamide prophylaxis is indicated in all rheumatic fever subjects during the winter months.
5. Treatment with salicylates without the addition of sodium bicarbonate is indi-

cated, and maintenance of adequate salicyl level is important.

6. Twenty-three of this age group developed cardiac residual disease during the first year of observation.

7. Rheumatoid arthritis at the time of its onset in this age group may be indistinguishable from rheumatic fever without prolonged observation.

8. Convalescent activity as outlined apparently does not increase the incidence of cardiac residual disease and aids in the rehabilitation of the rheumatic fever patient.

REFERENCES

1. Coburn, A. F.: Observation on the Mechanism of Rheumatic Fever, Lancet. 2:1025-1030 (Oct. 31) 1936.
2. Coburn, A. F.: Salicylate Therapy in Rheumatic Fever, A Rational Technique, Bull. Johns Hopkins Hosp. 73:435-464 (Dec.) 1943.
3. Coburn, A. F., and Moore, L. V.: The Prophylactic Use of Sulfanilamide in Streptococcal Respiratory Infections with Especial Reference to Rheumatic Fever, J. Clin. Investigation 18:147-155 (Jan.) 1939.
4. Coburn, A. F., and Moore, L. V.: Salicylate Prophylaxis in Rheumatic Fever, J. Pediat. 21:180-183 (Aug.) 1942.
5. Coburn, A. F., and Pauli, R. H.: Studies on Relationship of Streptococcus Hemolyticus to the Rheumatic Process, J. Exper. Med. 56:609-676 (Nov.) 1932.
6. Cohn, A. E., and Swift, H. F.: Electrocardiographic Evidence of Myocardial Involvement in Rheumatic Fever, J. Exper. Med. 39:1-35 (Jan.) 1924.
7. Haig-Brown, C.: Tonsillitis in Adolescents, London, 1886.
8. Karpovich, P. V., and others: Physical Fitness Tests for Convalescent Rheumatic Patients, to be published.
9. Smull, K., Wegria, R., and Leland, J.: The Effect of Sodium Bicarbonate on the Serum Salicylate Level during Therapy of Patients with Acute Rheumatic Fever, J. A. M. A. 125: 1173-1175 (Aug.) 1944.
10. Swift, H. F.: Rheumatic Heart Disease, Pathogenesis and Etiology in their Relation to Therapy and Prophylaxis, Medicine 19:417-440 (Sept.) 1940.

NATIONAL INFANTILE PARALYSIS FUNDS

The National Foundation for Infantile Paralysis announces that the 1945 "March of Dimes" topped last year's unprecedented donations by more than 50 per cent, the American people contributing $16,589,874 as compared with $10,973,491 for 1944.

Of the total amount of funds raised by the Foundation, 50 per cent is allocated to national headquarters of the Foundation to finance research into the cure and prevention of infantile paralysis and a broad educational program which includes scholarships and fellowships in orthopedic nursing, physical therapy, orthopedic surgery, virology, and health education, as well as to maintain an emergency epidemic fund to aid county chapters in areas hard hit by outbreaks of the disease. The other half of the "March of Dimes" funds is retained by county chapters of the Foundation to carry on year-round services to infantile paralysis victims in the 3,070 counties of the United States.

Although the incidence of infantile paralysis in the United States has been high in 1945, there is marked improvement over 1944, when the United States had its second largest epidemic of infantile paralysis, with a total of 19,272 cases. As of August 11, 1945, there were 3,558 cases as compared with 5,008 for the same period last year. States showing a marked increase in the number of cases as of August 11 this year and their comparative 1944 figures are Texas 553 (123 last year); New Jersey 280 (60 last year); Tennessee 168 (46 last year); Alabama 97 (61 last year); South Carolina 101 (39 last year); Massachusetts (August 4) 62 (46 last year); Oklahoma 87 (33 last year); Connecticut 56 (33 last year); and Utah 65 (11 last year).

THE INCIDENCE OF RHEUMATIC VALVULITIS IN MILITARY INDUCTION EXAMINATIONS WITH SPECIAL REFERENCE TO CARDIAC EVALUATION

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The diagnosis of chronic rheumatic valvulitis is one of the most important problems in diseases of the cardiovascular system. Rheumatic valvulitis comprises approximately 50 per cent of the rejections, because of cardiovascular defects, in men examined for general military service.[3] The present discussion is based on observations made in more than 25,000 military induction examinations. These men were in the age group of 18 to 37 years, lived in the central states region, and represented a cross section of the male population. The incidence of rheumatic valvulitis was 1 per cent of the total examinations, or a rate of 100 in 10,000.

Generally, it is recognized that the diagnosis of a rheumatic fever, in approximately one-half of the cases, is difficult to establish. But, in contrast to the recognition of the protean manifestations of rheumatic fever, there should be no similar difficulty in the recognition of existing valvulitis. If careful examinations are made in all cases, a positive diagnosis of rheumatic valvulitis usually can be made. From the results of the induction examinations there are a number of factors in evaluation of the cardiac status that should be emphasized. These are exclusive of special diagnostic procedures.

Determination of Cardiac Size.—The apical pulsation is the best index of cardiac size. However, normally a laterally displaced impulse may occur with forceful contraction of the heart. In the absence of an apical impulse, percussion is frequently unreliable, except as a general indication of cardiac size. A laterally impaired percussion note may occur by interposition of extracardiac tissues.

Left ventricular enlargement is presumable in the presence of a laterally displaced impulse, especially if there is an associated etiologic factor, as for example, systemic arterial hypertension. Right ventricular enlargement is presumable in the presence of a diffuse systolic pulsation of the precordium.

Interpretation of Cardiac Sounds.—The American Heart Association has recommended a nomenclature for use in describing sounds and murmurs.[5] This standard is a prerequisite for a proper description of the cardiac examination.

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Normal Sounds.—The first sound is related to ventricular contraction, occurring during the isometric phase, with no evidence to indicate that closure of the auriculoventricular valves contributes to its production. Lengthening and reduplication of this sound is common and heard best at the apex. It may be caused by: (1) accentuation of the thoracic impact on cardiac contraction; (2) asynchronism of ventricular contraction; and rarely (3) audibility of auricular contraction.

The apex of the heart is the point of maximum intensity, and, if there is reduplication, both components are usually of equal intensity.

Lengthening of the first sound may simulate an apical systolic murmur. A lengthened sound and a murmur may coexist, especially if there is a tachycardia. Either or both may disappear with a normal cardiac rate.

Reduplication of the first sound may simulate the presystolic accentuation of an apical diastolic murmur. It can be differentiated from this by the recognition of two short sounds, the absence of a crescendo first component and the failure to elicit a preceding diastolic murmur in the lateral recumbent position after exercise.

The second sound is produced by closure of the aortic and pulmonary semilunar valves. In the normal heart reduplication of this sound is less common than that of the first sound. It may be caused by: (1) abnormal increase in disproportion of arterial pressure in the systemic and pulmonic circuits; (2) asynchronism of ventricular contraction. The base of the heart is the point of maximum intensity. Simultaneous reduplication of the first and second sounds is uncommon.

Reduplication of the second sound may simulate a sound ("the opening snap") occasionally associated with an apical diastolic murmur. It can be differentiated by the absence of the murmur itself. It may be misinterpreted as a short diastolic murmur, but the latter, at the base of the heart, is rare.

Accentuation of the second sound is difficult to evaluate because of numerous influencing factors. A loud aortic second sound is less often associated with systemic hypertension than a loud pulmonic second sound is associated with disorders that cause pulmonic hypertension. A loud aortic second sound is of small value as a diagnostic aid. A loud pulmonic second sound is of value in respect to indicating a careful examination for an apical diastolic murmur.

The effect of disease of the aortic leaflets extant to alteration of the aortic second sound is unreliable in the absence of an aortic valvular murmur. The "tambour" quality of this sound in the presence of syphilis may be considered as a probable indication of aortitis. It is heard more often in persons without syphilitic aortitis.

The mechanism of production of the physiological third heart sound, heard more commonly in this age group, is not definitely established. It is thought to be due to a normal impact in diastole, transmitted by the more pliable ventricular muscle of youth. The apex is the point of maximum intensity and this sound is usually softer than the first and second sounds.

The mechanism of production of the third sound and of protodiastolic gallop apparently is the same. The terminology depends on the basic causative factor.

Extracardiac Sounds.—Cardiorespiratory murmurs are usually described as heard during inspiration, but they may be heard in both phases of respiration, especially if there is a small respiratory excursion. Their points of audibility include the apex, base, or sternal border. If confined to inspiration the murmur is systolic in time. If related to both phases of respiration the murmur may be either diastolic or both systolic and diastolic.

The systolic murmur has a phasic variation with respiration and can be made to disappear with the subject in the recumbent position. The diastolic murmur is usually similar in location and character to the murmur of aortic insufficiency and may persist in the recumbent position. It can be made to disappear by forced expiration. (A forced inspiration may cause a soft pathologic diastolic murmur to disappear by interposing pulmonic tissue and therefore is not a reliable test.) The continuous systolic and diastolic cardiorespiratory murmur is usually similar in location to the murmur of a patent ductus arteriosus. It also can be made to disappear by forced expiration.

A short, sharp sound, systolic in time, not variable with respiration, may be heard at the apex, or less commonly at the base of the heart. It has no counterpart in character to any other sound emanating from the chest; its mechanism of production is undetermined, and its presence is of no significance.

Interpretation of Cardiac Murmurs.—The detection of murmurs involves the fundamental methods of cardiac examination—establishing the location and direction of transmission of systolic and diastolic murmurs, and eliciting a latent diastolic murmur by the proper use of position and exercise during examination of the patient. It also requires the recognition of the variations of normal cardiac sounds that are usually associated with valvulitis and that indicate a careful ex-

amination of a definite region of the precordium.

"Apical" Murmurs.—The systolic murmur at the apex, in general, is the most difficult one to interpret. The reasons for this may include:

1. Tachycardia. This increases the velocity of the circulation with production of a murmur. It may be due to resultant cardiac dilatation and valvular incompetency, or simply to rapid hemic ejection. Arterial hypertension may similarly produce a murmur through cardiac dilatation and valvular incompetency.

2. Sound intensity. The ability to grade intensity depends on a personal equation. With a murmur of questionable intensity the decision as to its cause can usually be made from other factors. Approximately one-half of physiological apical murmurs are transmitted with decreasing intensity from the basal pulmonic region. Failure to recognize that the point of maximum intensity is at the base is common.

3. Effect of position, respiration, and exertion. The alteration of the character of the murmur, with the subject in different positions and phases of respiration, when the murmur is of questionable intensity, may be a deciding factor. Exertion increases the intensity and extent of transmission of apical systolic murmurs. Failure to realize that this is of no value in evidence of a pathological murmur is common. Exercising the subject is a useful procedure to elicit a diastolic murmur, but not to evaluate a systolic murmur.

There are, of course, situations where a diagnosis based on a single observation is impossible. In general, regardless of a negative history of rheumatic fever, in the absence of tachycardia and hypertension, a person with an apical systolic murmur of moderate intensity unaffected by position or respiration, probably has valvular heart disease.

The diastolic murmur at the apex is apparently more frequently determined to be present than is a diastolic murmur at the base of the heart. This was concluded from information obtained in 50 consecutive instances of diastolic murmurs of mitral valvular disease, compared to 50 consecutive diastolic murmurs of aortic valvular disease found in men who had been previously examined.

In the former group of mitral lesions approximately one-half had previously been informed of their existing valvulitis. In the latter group of aortic lesions, only approximately one-fifth had previously been informed of their valvulitis. This information was obtained from the inductees after their rejection for military service which obviated possible reticence in giving information for patriotic or other motives.

More common recognition of apical diastolic murmurs may be due to concomitant alteration of the character of the first sound at the apex, accentuation of the second sound at the basal pulmonic area, or an associated systolic murmur as an incentive for a more careful auscultation.

"Basal" Murmurs.—Interpretation of the basal systolic murmur is usually not so difficult as is interpretation of the apical systolic murmur. The greatest difficulty that occurs, is the determination of the point of origin of the systolic murmur, especially if from the aortic or pulmonic valve. This is facilitated by noting the direction of transmission of the murmur. The systolic murmur originating at the aortic valve is not so commonly influenced by tachycardia and hypertension as is the systolic murmur originating at the pulmonic valve.

The problem of interpretation may be analogous to that of the apical systolic murmur, relative to gradation of intensity. A murmur of maximum intensity at the pulmonic area is notably affected by alteration of position and respiration. Loud pulmonic murmurs, with an associated thrill, may be considered to be of pathologic origin.

A soft murmur, of maximum intensity at the aortic area, unaffected by alteration of position or respiration, is more apt to be of pathologic origin than an apical murmur of similar characteristics. A physiologic dilatation of the aorta is rare, compared to that of the pulmonic artery, but pathologic dilatation from syphilitic aortitis may produce a murmur.

If the latter disease be excluded, in general, regardless of a negative history of rheumatic fever, a person with a basal aortic systolic murmur of soft to moderate intensity, unaffected by position or respiration, probably has valvular heart disease.

The origin of a loud murmur heard throughout the precordium, with relatively equal intensity at the apex and base, may be difficult to determine. In the absence of a palpable thrill, the direction of transmission from the precordium facilitates anatomical diagnosis.

The murmur caused by a patent ventricular septum, is usually localized to the parasternal area in the third and fourth interspaces.

The diastolic murmur at the base, of all murmurs, is apparently the one least frequently determined. Compared to the apical diastolic murmur, it should be the easier of the two to detect since there are no confusing alterations of normal sounds to cause error. Less common recognition may be due either,

and more probably, to the character of the murmur itself—a softer intensity, a higher pitch, or to the absence of an associated systolic murmur. The examiner should not depend, for diagnostic aid, on the presence of related peripheral vascular phenomena—alteration of the pulse and the pulse pressure, as these are usually absent in a minor grade of insufficiency of the aortic valve.

Incidence of Valvular Involvement.—The incidence of the various types of valvular involvement in 250 men rejected is summarized in table 1.

TABLE 1.—*Incidence of Various Types of Valvular Involvement in 250 Men.*

	number of cases		per cent	
mitral valve alone	161		64.4	
mitral insufficiency		101		40.4
mitral stenosis (with or without insufficiency)		60		24.0
aortic valve alone	52		20.8	
aortic insufficiency		48		19.2
aortic stenosis		4		1.6
mitral and aortic valve combined	37		14.8	
	250		100.0	

COMMENT

Approximately one-fourth of all men rejected for chronic rheumatic valvulitis had no previous knowledge of the presence of valvular heart disease.

The greatest number of cases without previous information was those with apical systolic murmurs. This was probably due largely to the fact that it was the predominating type of valvular involvement.*

When this murmur cannot be interpreted from the physical examination alone, the one valuable diagnostic aid is cardiofluoroscopy, as was determined by Parker and White from an evaluation of all objective methods of examination in a large number of men.[6] This procedure gave abnormal results in two-thirds of structural murmurs; the main evidence was enlargement of the left auricle. Cardiofluoroscopy should be used when the doubtful individual case requires this procedure.

In civilian life the relative importance of murmurs in persons in this category depends on the cardiac functional status as influenced by the environmental situation. But in military life, as emphasized by Master,[4] latent mitral valvular disease, masquerading as a functional systolic murmur, becomes disabling under the stress of warfare and cardiac failure may occur.

The next greatest number of cases without previous information was those with basal diastolic murmurs. Delaney and associates[2] in a report of valvular heart disease previously unrecognized, also found this latter situation to be relatively common.

The remaining number of men disqualified for rheumatic valvulitis had a combination of lesions and are grouped together in the tabulation of results. These men had a greater incidence of previous information proportionate to the multiplicity of the lesions.

Another fact determined in this study was a predominance of aortic valvular involvement in proportion to its reported occurrence in other series of rheumatic valvular heart disease. A conditioning factor was probably the sex incidence, 100 per cent males examined. However, it has been demonstrated in one study of autopsy cases, in which death occurred up to the eighth decade, that the aortic and mitral valves were involved with equal frequency in males.[1]

*AUTHOR'S NOTE.—The actual number of cases of mitral insufficiency may appear high but not if considered in relation to the total number of apical systolic murmurs.

SUMMARY

Of 25,000 men examined at the Induction Station, in the age group of 18 to 37 years, the incidence of rheumatic valvulitis was 1 per cent.

The factors in evaluation of the cardiac status, exclusive of special diagnostic procedures, have been presented in relation to their proper interpretation.

The involvement of individual valves in decreasing order of frequency was mitral insufficiency, mitral stenosis, aortic insufficiency, and aortic stenosis. The incidence of previous information of valvulitis, in proportion to the individual number of cases, in decreasing order of frequency, was aortic stenosis, mitral stenosis, aortic insufficiency, and mitral insufficiency. In this respect, however, aortic stenosis was too uncommon in proportion to a significant number of cases for justifiable comparison with the other lesions.

REFERENCES

1. Clawson, B. J.: Rheumatic Heart Disease; An Analysis of 796 Cases, Am. Heart J. 20:454-474 (Oct.) 1940.
2. Delaney, J. H., Miller, S. I. Kimbro, R. W., and Bishop, L. F., Jr.: Valvular Heart Disease Previously Unrecognized in Military Medical Examinations, J. A. M. A. 123:884 (Dec. 4) 1943.
3. Levy, R. L., Stroud, W. D., and White, P. D.: Report of Reexamination of 4994 Men Disqualified for General Military Service because of the Diagnosis of Cardiovascular Defects, J. A. M. A. 123:937 (Dec. 11) 1943; 1029 (Dec. 18) 1943; Am. Heart J. 27:435, 1944.
4. Master, A. M.: Evaluation of Systolic Murmurs, U. S. Nav. M. Bull. 42:307 (Feb.) 1944.
5. New York Heart Association, New York: Nomenclature and Criteria for Diagnosis of Diseases of the Heart, ed. 4, 1939.
6. Parker, R. C., Jr., and White, B. V., Jr.: Aids to Evaluation of Systolic Heart Murmurs in the Selection of Naval Personnel, U. S. Nav. M. Bull. 42:87 (Jan.) 1944.

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Prompt diagnosis of tuberculosis is important to the patient, family, and community. Every suspected case should be cleared of suspicion as quickly as possible by being proved innocent or guilty of harboring the disease.—Henry D. Chadwick, M. D., and Alton S. Pope, M. D., The Modern Attack on Tuberculosis.

THE EXPERIMENTAL BASIS FOR THE PATHOGENESIS AND TREATMENT OF RENAL HYPERTENSION

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Introduction.—It has been estimated that there are at least five million hypertensive individuals in the United States.[14] Since this condition is so common, an understanding of its pathogenesis is one of the most important practical problems in experimental medicine. Clinical observation having contributed little to an understanding of the pathogenesis of hypertensive cardiovascular disease, it was anticipated that a study of hypertension as induced in the experimental animal might elucidate the cause and suggest effective measures for its control. The results of recent experimental studies have contributed greatly to our understanding of the nature of hypertension and pointed the way to possible methods for its ultimate control.

THE ROLE OF THE KIDNEY IN THE PATHOGENESIS OF HYPERTENSION

That the kidney plays an important role in the pathogenesis of hypertension was evident to the earliest observers who noted the frequent elevation of the blood pressure in chronic nephritis. On the other hand, it was difficult to see how the kidneys could be held responsible for the elevation in blood pressure observed in so-called "essential" hypertension in which these organs were not obviously affected, at least as judged from their normal excretory activity.[2] This apparent paradox was eliminated with the demonstration that partial occlusion of the renal artery in dogs resulted in an elevation in blood pressure without serious interference with the renal excretory function.[4]

Several other procedures are now available for inducing hypertension in the experimental animal. The simplest of these consists in merely compressing the renal parenchyma by means of a ligature applied as a "figure of eight" around the kidney. When this is done, hypertension affecting both the systolic and diastolic levels results with the ultimate development of cardiac hypertrophy and generalized arteriolar changes similar to those observed in the human. There is every reason to believe that we can reproduce "essential" hypertension as it affects man in both its benign and malignant forms in the lower animal and that studies based on the latter are applicable to the elucidation of the pathogenesis and treatment of the human disease.

THE RENAL PRESSOR MECHANISM

In 1898, Tigerstedt and von Bergmann noted the pressor effects of renal extracts and designated this blood-pressure raising substance as renin. Subsequent authors assumed that renin or compounds containing an amino-grouping as occurs in epinephrine might be responsible for the rise in pressure observed in hypertension. In more recent years it has been shown that renin is a protein which is in itself not a pressor substance but that when activated gives rise to angiotonin[11] or hypertensin,[1] which when injected causes the observed elevation in blood pressure.

The view that hypertension is due to the presence of a circulating pressor substance released by the kidney has received general acceptance. However, more recent work has shown the inadequacy of this assumption. Without entering into details it will suffice to enumerate some of the experiments which definitely speak against the pressor hypothesis:

1. The fact that pithing a hypertensive rabbit abolishes the hypertension but injection of renin (as angiotonin or hypertensin) still elicits a rise in blood pressure.[3]
2. The fact that unilateral nephrectomy in the rat, rabbit or dog induces the same elevation of blood pressure as does an operation on one kidney.[6]
3. The fact that removal of a kidney (which has been operated upon and given hypertension) fails to abolish hypertension. This has also been demonstrated clinically in opposition to earlier hopes and claims to the contrary.[13]
4. That hypertension may exist in the absence of all renal tissues as shown best in the parabiotic animal.
5. The demonstration that in patients suffering from chronic hypertension, there is no increase in the amount of pressor substances of the blood, nor a deficiency of hypertensinase (or angiotonase)[10] the enzyme which in *in vitro* studies causes the destruction of this pressor substance.

The only conditions in which a pressor substance, supposedly of renal origin, has been demonstrated in the blood are acute glomerulonephritis, eclampsia and massive hemorrhage.[1] It is probable, therefore, that in these conditions pressor substances (their identity has not been established) may be liberated from the ischemic kidney which are related to those elaborated after inflicting an acute injury or ischemia of the kidney in the experimental animal or which are present in

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renal extracts. However, we cannot regard these as the causative agents of the elevated blood pressure in chronic hypertension.

THE DEFICIENCY THEORY

If we discard the theory that chronic hypertension is mediated by a pressor agent circulating in the blood stream, what alternative hypotheses will explain the available experimental and clinical facts? The fact that denervation of the kidney fails to relieve hypertension[4] excludes a nervous mechanism as the responsible mediator. We must conclude that the condition is humoral in origin or else secondary to some renal excretory deficiency which does not manifest itself by our usual criteria for determining renal insufficiency.

Assuming a humoral mechanism as responsible for the development of renal hypertension, it has been suggested that the kidney normally is responsible for the elaboration of an incretory substance, a deficiency of which in disease leads to the systemic disorder which we designate as hypertension.[6] This theory motivated the trial of renal extracts for the treatment of hypertension. Disregarding the depressor effects of these extracts when administered parenterally as being due to non-specific and probably noxious action[12], the fact that other extracts have been prepared which are effective when administered orally[9] favors the above-outlined deficiency theory.

Although of importance from a theoretical standpoint in elucidating the pathogenesis of hypertension, the use of renal extracts in the treatment of hypertension is impracticable due to the difficulties and expense involved in their preparation. The same drawback exists regarding the use of extracts derived from certain marine and vegetable oils which have also proven effective in lowering the blood pressure of experimental animals as well as a few human patients.[7] Further efforts along these lines are, however, indicated with the ultimate hope of obtaining by synthesis perhaps a readily available effective agent.

SALT RESTRICTION IN THE TREATMENT OF HYPERTENSION

During the course of an experimental study of the effects of various diets and dietary deficiencies or excesses on the blood pressure of experimental hypertensive animals it was noted that restriction of sodium intake resulted in marked reduction of the blood pressure to almost normal levels.[8] This unexpected effect did not result in deleterious action but in fact led in the rat to an actual extension of life expectancy as compared to control animals on their usual diet.

The above-described experiments have led us to reinvestigate the possible value of salt restriction in the human hypertensive. Preliminary studies have revealed the effectiveness and practicability of salt restriction in lowering the blood pressure of some patients. However, adequate measures must be taken to reduce the sodium intake to less than a gram a day. It does not suffice to merely utilize the so-called "low salt" diets in use in the treatment of congestive heart failure. At the moment this procedure would appear to be the more effective practical method available for general clinical application and worthy of further study.

SUMMARY

1. Experimental studies on laboratory animals indicate that many cases of hypertension, particularly of the so-called essential type, are renal in origin and are mediated through a humoral mechanism.

2. The view that chronic hypertension is caused by the circulation of a pressor substance liberated by the diseased or ischemic kidney is shown to be contrary to many experimentally demonstrable facts.

3. An alternative hypothesis according to which hypertension is due to a deficiency of some renal factor essential to the normal state of the organism has led to the search in renal extracts and marine and vegetable oils for an agent effective in lowering the blood pressure. Such extracts are still in an experimental stage of development. Experimental studies have indicated a disequilibrium in the sodium balance of the organism in hypertension and have led to the re-evaluation of restriction of this cation as a means of lowering the blood pressure.

REFERENCES

1. Braun Menendez, E., and others: Hipertension Arterial Nefrogena. El Ateneo, 1943.
2. Castleman, B., and Smithwick, R. H.: The Relation of Vascular Disease to the Hypertensive State Based on a Study of Renal Biopsies from One Hundred Hypertensive Patients, J. A. M. A. 121:1256-1261 (April 17) 1943.
3. Dock, W.: Vasoconstriction in Renal Hypertension Abolished by Pithing, Am. J. Physiol. 130:1-8 (July) 1940.
4 Goldblatt, H.: Experimental Hypertension Induced by Renal Ischemia, Harvey Lectures, Bull. New York Acad. Med. 14:523-553 (Sept.) 1938.
5. Grollman, A.: A Simplified Procedure for Inducing Chronic Renal Hypertension in the Mammal, Proc. Soc. Exper. Biol. & Med. 57:102-104 (Oct.) 1944.
6. Grollman, A.: Experimental Chronic Hypertension: Its Mechanism and Amelioration by the Use of Various Blood Pressure Reducing Substances, Conference on Experimental Hypertension, New York Academy of Sciences. In press.
7. Grollman, A.: The Use of Marine and other Oils in the Reduction of the Blood Pressure in Hypertension, J. Pharmacol. & Exper. Therap. In press.
8. Grollman, A., and others: J. A. M. A. In press.
9. Harrison, T. R., Grollman, A., and Williams, J. R., Jr.: Separation of Various Blood Pressure Producing Fractions of Renal Extract, Trans. A. Am. Physicians, 57:187-195, 1942.
10. Haynes, F. W., and Dexter, L.: The Hypertensinase Content of Plasma of Control Subjects and of Patients with Hypertension and Other Diseases, J. Clin. Investigation, 24:75-77 (Jan.) 1945.
11. Page, I. H.: Studies on the Mechanism of Arterial Hypertension, J. A. M. A. 120:757-762 (Nov. 7) 1942.
12. Schales, A., Stead, E. A., Jr., and Warren, J. V. Nonspecific Effects of Certain Kidney Extracts in Lowering Blood Pressure, Am. J. M. Sc. 204:797-809 (Dec.) 1942.
13. Sensenbach, W.: Effects of Unilateral Nephrectomy in

Treatment of Hypertension, Arch. Int. Med. 73:123-130 (Feb) 1944.
14. Stieglitz, E. J.: Geriatric Medicine, Diagnosis and Management of Disease in the Aging and in the Aged, 1943.
15. Tigerstedt, R., and Bergman, P. G.: Niere and Kreislauf, Skand. Arch. Physiol. 8:223-271, 1898.

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GROWTH, THYROID AND DENTAL CARIES

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This paper is presented as a preliminary report on a subject still under study. The object of the study is to show the relationship of certain well established factors in growth and development to the presence or absence of dental caries in children.

The essential growth factors are fairly well established. We do not question the importance of the heredity and prenatal well-being. The importance of nutrition cannot be denied. Much valuable information has been acquired through research and made available to the medical profession and the public on the requirements of the body for growth and the maintenance of health. Environmental influence is usually considered, primarily for diseases acquired in certain social levels and the economic ability to properly combat these hazards. The influence of the endocrine glands are brought to mind usually in abnormal growth and development and accepted without thought in the apparently normal individual.

Certain standards for growth have been laid down by careful study by many workers. The general appearance of the child gives a fairly accurate idea of normal to abnormal. Proportions of body to extremities and to head, then the ratio of flesh to skeletal system may complete our rough picture. Tables of height and weight are of value in telling us how far we are from the average. I have thought that too much importance has been placed on these tables, especially by parents with children slightly under the average given for age. The history of the infant's development with regard to holding up its head alone, the appearance of the first tooth, and time of appearance of other teeth, sitting and walking alone, the closing of the fontanelle, talking and quality of speech development—these seem to show best the normal or abnormal progress. I have found that some one of the points in the history will suggest the desirability of x-ray study of ossification centers in the skeletal system. Most of the patients in the cases in the present study have been under 8 years of age, so the carpal centers have been the ones studied. Basal metabolic tests have been used on children 10 years of age or over.

As a low metabolism test generally indicates a thyroid need, so also does the retarded bone age indicate such a need. Some excellent illustrations of the use of thyroid and bone age changes are to be found in the work of others.[4]

The cause of dental caries has been attributed to many factors. Nutritional deficiencies are most prominent causes cited. I agree that every diet should have necessary mineral elements as calcium and phosphorous, fats, carbohydrates, proteins and vitamines. These foods should be consumed in forms requiring the least amount of processing.[5] Tooth decay in a group of diabetic children was controlled by diet more than by the control of the diabetes.[1] A high content of flourine in water causes mottled enamel but does not cause dental caries.[3] Bacterial invasion of the tooth, excessive sweets and other factors have been listed as causes of dental caries.[2]

It is not the purpose of this report to deny the effect of these factors, but to present another possible element in the prevention of dental caries. This element is the influence of thyroid in preventing dental caries in children who show some degree of thyroid deficiency.

When an infant or child shows substandards of growth or development it has been my routine practice to request roentgenograms of the carpal bones. The developmental age is determined by the appearance of ossification centers. In comparing developmental age to chronological age I have used the standards of E. C. Vogt and V. S. Vickers from The Center For Research in Child Health and Development of the Harvard School of Public Health. These standards of developmental age are given in three groups: average, below, and above average. Rarely have those showing above average bone age received any treatment.

Patients with a bone age below average and showing dental caries are given small doses of thyroid. Patients with average bone age films and showing dental caries are usually given small doses of thyroid, and treatment is continued as long as general behavior and development progress normally. Dental caries was found less frequently in children with an average or above average bone age than those in the below average group.

Most cases of cretinism are recognized before the teeth erupt and usually are receiving thyroid by the time the teeth appear. The few cases of cretinism that I have observed under treatment did not show any dental

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caries. One cretin given thyroid for the first time at the age of 2 years did show arrest of progress of caries already present.

One of my earliest patients given thyroid for dental caries as the only symptom was the nine year old son of a dentist. He had many cavities which had been well filled. The teeth had a chalky, dull appearance instead of a hard, glistening look. Many fillings had been replaced because of enlarging of the cavity and the friable structure around the filling. After about two months of thyroid treatment the teeth had improved in appearance and the fillings were remaining in place. When this youngster was last seen his teeth showed definite improvement. By improvement in this case is meant the slowing or failure of appearance of new caries or for cavities already present to increase in size or only slightly.

For the past four years an attempt has been made to determine if there is a workable association between bone age as determined by roentgen studies of children to the presence of dental caries. The findings indicate that approximately 75 per cent of children with dental caries had a retarded bone age. With thyroid therapy and strict nutritional regulation most children exhibited improvement in tooth structure. A small number showed no improvement in teeth. All of the patients given thyroid increased in bone age faster than expected in normal growth.

Approximately 30 per cent of the children with retarded bone age did not show dental caries. These dental examinations were made during a routine pediatric visit, and were not made by a dentist. All cases were from private practice.

CONCLUSION

Thyroid deficiency may be considered as a possible factor contributing to dental caries in children with a retarded bone age. The results are encouraging enough to warrant further study.

REFERENCES

1. Boyd, J. D.: Long Term Prevention of Tooth Decay among Diabetic Children, Am. J. Dis. Child. 66:349-361 (Oct.) 1943.
2. Brown, W. D.: Some Unattained Objectives in Pediatrics, Texas State J. Med 38:335-338 (Sept.) 1942.
3. Dean, H. T.; Jay, P.; Arnold, F. A., Jr., and Elvove, E.: Domestic Water and Dental Caries, Pub. Health Rep. 56:365-381 (Feb. 28) 1941.
4. Shelton, E. K.; Tager, B. N., and Hoyt, E.: Cretinism; Case Report, Endocrinology 27:425-429 (Sept.) 1940.
5. Stone, J. B.: Children's Teeth in Relation to Pediatric Practice, South. M. J. 29:731-738 (July) 1936.

Routine x-ray studies of patients, nurses, and other hospital employees will not only disclose unsuspected tuberculosis, which is extremely important to the individual, but will also protect other patients and employees from the danger of infection. As more and more states are making tuberculosis a compensable disease, this factor will become increasingly important to hospital administration.—Karl H. Pfeutze, M. D., Mineral Springs Sanatorium, Cannon Falls, Minn.

TERMINAL SAPHENOUS RESECTION

A Report on Over Three Hundred Cases

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Terminal saphenous resection may be defined as the removal of the terminus, or the proximal end, of the great saphenous vein. In actual practice about two or three centimeters of the vein is removed at its junction with the femoral vein so that practically no stump is left.

INDICATIONS AND CONTRAINDICATIONS

Indications for terminal saphenous resection are:

1. Valvular insufficiency in the great saphenous system.

2. Threatened valvular insufficiency. These patients have moderate to large varicosities with a history of rapid progression of the condition, but the various procedures used to determine valvular status show the valves to be competent.

3. Acute thrombophlebitis confined to a segment of the great saphenous system.

Contraindications may be divided into absolute and relative. The absolute contraindications are general or local. General absolute contraindications are conditions causing the patient to have a short life-expectancy or to be non-ambulatory, such as malignancies, leukemia, extreme old age, advanced tuberculosis, severe heart disease, sepsis, portal vein obstruction, *et cetera.* Local absolute contraindications are acute inflammatory conditions of the skin, lymph nodes, or subcutaneous tissues in the operative field or of the extremity itself, such as acute cellulitis, acute lymphangitis, or acutely inflamed ulcers. Obstruction of the deep venous return is an absolute contraindication, but is rarely encountered except in acute thrombophlebitis. When and if these conditions are done away with the contraindication is removed.

Relative contraindications are:

1. Pregnancy. In those women who were pregnant, conservative therapy was used, as a rule, until two months after parturition had taken place. In many of these active therapy has not been needed. For the above reason and also because of the not infrequent complications of femoro-iliac thrombophlebitis following pregnancy, and because of the frequent atypical varicosities involving the vulvar and gluteal and small

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saphenous veins, this plan of procedure has seemed to be the one of choice.

2. Extreme Obesity. Terminal saphenous resection can be a very difficult operation in the extremely obese patient. There seems to be an increase in the number of small veins, and the vessels tend to have very thin, friable walls. Exposure and dissection are much more difficult in these cases. In addition, many of these patients have edema and the complications of edema, irrespective of their venous valvular status so that the results obtained are not very satisfying. The surgeon who works infrequently in this area would do well to avoid operating on the extremely obese patient.

3. Deep thrombophlebitis and other peripheral vascular diseases. In such conditions a careful and detailed study of the course of the illness and the peripheral vascular status should always be made and surgery performed only when deliberate judgment indicates its value.

4. Other Illness. In any acute illness the patient should be allowed to recover fully before initiating treatment of his varicosities. In many chronic diseases in ambulatory patients advisability of operation and the time to carry it out depends on the analysis of the various factors present.

TECHNIC

The incision found to be the most satisfactory is one made parallel to the inguinal crease or sulcus (not inguinal ligament) ; its lateral end is over the femoral pulsation, and it extends for about 3 cm. in thin individuals to about 8 cm. in the obese. In the thin it is placed about 2 cm. distal to the inguinal crease; in the obese it is made almost in the crease, for the crease tends to be more distal in such patients. The incision is carried through the deep layer of the superficial fascia. The saphenous after being conclusively identified is picked up, clamped, and cut in the lower end of the wound. The distal end is doubly ligated with O chromic catgut and dropped back.

The proximal stump is now handled with the attached clamp to help manipulate it and is always dissected from below proximally, using the closed points of a small curved hemostat or a blunt dissector and occasional snips with the dissecting scissors. The dissection, if made by hugging the vessel itself, is usually easy. All tributaries are clamped, cut, and tied with OOO chromic as they are met; otherwise they tend to act like guy wires and interfere with further dissection. The saphenous is freed to its end, and then the femoral is dissected for a short distance about the saphenous opening. Slight and very careful traction is put on the saphenous stump, a small curved hemostat is placed on the stump about 3 mm. from the femoral with the point of the snap toward the operator. The saphenous is tied with O chromic just proximal to the clamp which is then removed. The stump is transfixed with O chromic distal to the ligature and is re-tied.

Dead spaces, small bleeders, and the deep layer of superficial fascia are closed with interrupted OOO chromic catgut. The skin is closed with interrupted vertical mattress suture of fine silk or cotton. The ends are left about four inches long, tied together, and the wound dressed. The skin sutures are removed, preferably on the third or fourth day.

ANATOMY

In over 300 cases, the saphenous was shown to empty into the femoral at the fossa ovalis in every case but one. In this case the patient was a man who had had several bouts of inguinal lymphadenitis which had caused the replacement of his subcutaneous tissues in the area by a mass of woody-hard fibrous scar. The great saphenous always follows a course from the medial side of the proximal thigh to the area of the fossa ovalis; when viewed in the operative area its distal portion is always much more medial than its terminus. This is very important in differentiating it from the lateral superficial femoral vein and the femoral vein itself. The tributaries encountered often do not conform to the textbook descriptions. In a sizeable proportion of the cases, the lateral superficial femoral vein is much larger and may be mistaken for the saphenous. Occasionally the tributaries that usually empty into the terminal saphenous form a separate trunk that enters the femoral just proximal to the saphenous opening.

The saphenous enters the femoral at a very acute angle if viewed from the side. For this reason dissection from below upward will always show the point of junction, whereas if viewed from above down it is often difficult to tell where the saphenous empties into the femoral. Frequently in patients who have had infections in the lower extremity, one or two enlarged lymph nodes are found anterior and even adherent to the terminal portion of the saphenous. In a large percentage of the cases the superficial external pudendal artery is found in the angle between the saphenous and femoral veins; if necessary for exposure it may be divided and ligated without any harm.

OPERATIVE COMPLICATIONS

During operation, complications are rare if care is used. In three of the early cases

the ligature slipped off the cut distal end of the saphenous and the vein retracted down into its bed. The assistant put pressure over the medial side of the thigh which stopped the bleeding and the medial end of the incision was extended in the course of the vein for about 3 to 5 cm. The vein was then easily picked up and religated. On one instance a very large and very friable saphenous tore just at its junction with the femoral and bleeding was very profuse even with the patient in Trendelenberg position and pressure by the assistant over the upper thigh. The adjacent tissues were brought over the area and sutured en masse, and a pressure bandage put on.

MORTALITY AND MORBIDITY

There has been no death in this series. Morbidity has been slight. In 3 cases bleeding from the wound occurred immediately postoperatively. The incisions were reopened in 2 cases. In one a small varicosity was found, and in the other the source of bleeding could not be determined. The third patient was kept in bed and a pressure dressing applied. The three did well thereafter. In a few cases pronounced induration, discoloration and tenderness occurred, which went on to suppuration and breaking down of the wound in two cases. In one case a large fluctuant swelling appeared which on being opened drained a perfectly clear watery lymph. This drainage was profuse, gradually subsiding to cease in about ten days. In almost all the cases in which an intense local reaction occurred, enlarged or matted lymph nodes were found during the operation.

Spontaneous thrombosis of all or part of the great saphenous vein took place postoperatively in a fair percentage of the cases. On reviewing these cases it was found that most of them had had previous inflammation or ulceration of the affected extremity. There were no instances of postoperative pulmonary embolism.

RESULTS

In the cases in which the indication was an incompetent valvular system—the great majority of the cases, the reflux of blood down the saphenous was done away with. The results were good, symptomatically and therapeutically. In those cases in which resection was done but the valves were still competent, it is difficult to say what benefit the operation has been. In those cases, 14 in number, in which patients were operated on because of spontaneous phlebitis in the great saphenous system, all did well except one who developed a deep thrombophlebitis of the calf. In this case, it is possible that the deep thrombophlebitis preceded rather than followed the saphenous phlebitis.

In only one patient did there seem to be a recurrence of the incompetency of the great saphenous at the groin. On re-operation the lateral superficial femoral vein was the one found to be resected; the terminus of the saphenous was still present. Terminal saphenous resection was done which corrected the condition.

CONCLUSIONS

1. Terminal saphenous resection is a safe operation. There should be no mortality and very little morbidity attributed to it.
2. Terminal saphenous resection is of great value when there is a valvular incompetency of the great saphenous system or spontaneous phlebitis in this system.
3. Proper selection of cases with great care to respect contraindications is a prerequisite to obtaining good results.
4. Knowledge of the constant anatomic features of the operative area will facilitate the operative technic and protect against errors of commission or omission. The great saphenous vein always empties into the femoral vein at the fossa ovalis; it always runs toward the femoral vein from a medio-distal direction.

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NUTRITION REPORT ON CIVILIAN INTERNEES OF JAP PRISONS

American civilian internees of Japanese prison camps in the Philippines, who have recently been returned to the United States, were found in a survey by nutritional scientists of the Army Medical Department to be on the borderline state of extreme starvation.

According to the report, the food served the prisoners, in addition to being poorly cooked, consisted mainly of wilted greens, moldy corn, dirty rice, and a variety of sweet potatoes, which was often rotten. This soon led to vitamin-deficiency diseases. Relief packages were allowed in the camp only twice during the period of internment, all market venders were barred from the camp, and the only source of extra rations was the black market.

The report, in listing the effects of malnutrition on the eight children born in the prison camps, noted that only three showed any signs of vitamin deficiency. This was attributed to the mild climate and sunshine of the Philippines. The average weight loss, during the time of internment, jumped from 13.5 pounds in 1942 to 20 pounds in the last six months before liberation.

The most common symptoms still evident in the liberated Americans is digestive upsets, easy fatigability, and neuritis. Seventy-eight per cent of the internees, however, reported that they felt "fine" a few days after liberation. The rapidity of recovery of the adults and the relatively good condition of the children is a striking example of how quickly the human body will return to normal after semi-starvation.—S. G. O. Notes, Sept. 15, 1945.

ENDOMETRIOSIS

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I like to define endometriosis as misplaced endometrium. Novak defines pelvic endometriosis as "that condition in which tissue resembling more or less perfectly the uterine mucous membrane occurs aberrantly in the pelvic cavity." For the intra-uterine variety he uses the term adenomyosis and considers it a benign invasion of the endometrium into the uterine musculature, associated with a diffuse overgrowth of the latter.

The various theories to explain the etiology of endometriosis include the following:

1. Cullen's theory of adenomyosis in which he has shown that endometrium invades the muscle wall of the uterus.

2. Sampson's theory of regurgitation of menstrual material back through the fallopian tubes with subsequent peritoneal transplantation.

3. The theory of Meyer, Novak, and others that in pelvic endometriosis this aberrant endometrium results from abnormal differentiation in the celomic epithelium from which all genital mucous membranes arise.

4. Metaplasia of partially differentiated cells of urogenital origin (especially ovarian epithelium).

5. Halban's belief that endometriosis is a result of lymphatic spread of desquamated endometrium.

Perhaps as Novak says, an amalgamation of Sampson's and Meyer's theories may be the best solution. Cullen's theory is accepted by all for its explanation of adenomyosis.

The following classification by Lockyer as to type and location of endometriosis may be useful:

I. Intrapelvic
   - A. Uterine
     1. Diffuse—adenomyosis
     2. Circumscribed—adenomyoma
   - B. Extra-uterine
     1. Ovary
     2. Pelvic peritoneum—covering uterus, tubes, bladder, rectum, and sigmoid
     3. Uterine ligaments
     4. Vagina
     5. Vulva

II. Extrapelvic
   1. Umbilicus
   2. Abdominal wound
   3. Appendix—cecum
   4. Liver, gallbladder, small intestine, kidney
   5. Inguinal region—nodes and hernial sac

In Haydon's (1942) series of 569 cases of endometriosis the lesion was located as follows:

Ovaries	345
Uterus	313
Cul-de-sac	191
Uterine ligaments	69
Tube	16
Rectum	16
Sigmoid	8
Bladder	3
Abdomen	3
Appendix	1

In a group of endometriosis cases at the Nix Hospital the location was as listed in table 1.

TABLE 1.—*Location of Endometriosis in Cases at the Nix Hospital.*

Endometriosis according to location	1942	1943	1944
Uterus	52	76	58
Ovary	16	27	19
Tube	3	5	1
Cervix	1	3	1
Vagina	0	2	1
Appendix	3	0	4
Rectum	0	1	0
Colon	0	1	0
Peritoneum	2	0	1
Abdominal wall	1	0	0
Total	78	115	85

PATHOLOGY

In endometriosis of the uterus the organ is slightly to markedly enlarged, one wall is generally thicker than the other, adhesions are usually present over the serosal surface, the cut surface of the wall is gray, trabeculated, and whorled, and often, but not always, small chocolate colored cysts are seen. Microscopically there are islands of endometrium with or without cyst formation deeper in the muscle wall than can be accounted for by the frequent slight invagination of endometrium normally seen. The disease may show circumscribed but not encapsulated lighter gray areas as described above.

In the ovary there may be small red or dark blue areas on the surface, adhesions to nearby organs, and on section there is the typical chocolate cyst a few millimeters in diameter up to about 6 cm. The cyst contents consist of thick chocolate colored material. The wall is thick and the lining is dark brown. It has a lining of endometrium in the typical case. In some the stroma is missing, in others the endometrium is missing and only a broad zone of hemosiderin-laden phagocytes persists. In the latter case the diagnosis is presumptive and open to question. The misplaced endometrium may or may not exhibit the same cyclical changes as the uterine mucous membrane, including decidual reaction and menopausal atrophy.

Elsewhere in the pelvis the picture is one of dense adhesions, small red or brown areas, and possibly small nodules or cysts. These

From the Nix Hospital Laboratories, Nix Professional Building, San Antonio, Texas.

all show endometrial tissue microscopically.

SYMPTOMS

In Haydon's series the frequency of symptoms in 369 cases was as follows:

1.	Menorrhagia	300
2.	Dysmenorrhea	226
3.	Abdominal pain	224
4.	Backache	179
5.	Metrorrhagia	122
6.	Dyspareunia	70
7.	Bowel pain	25
8.	No symptoms	16

Some authors stress a difference in the menstrual pain—it is said to be deep seated, constant, coincident with menstruation, increasing in severity, and persisting. Sterility is a prominent accompanying feature. It was present in 32 per cent of Counseller's (Mayo) series, 44 per cent in Meig's cases, and 53 per cent in Haydon's group. The age varies greatly from 16 to 78 in Haydon's cases, but the disease is most frequent from 30 to 40.

Bimanual pelvic examination is important. Pelvic organs may be fixed by adhesions—there may even be a frozen pelvis. Tenderness varies. Beading of uterosacral ligaments may be felt on rectovaginal examination. The uterus is usually uniformly enlarged. Retroversion of the uterus is frequent. Sanders' paper indicated a correct preoperative diagnosis in 24 per cent.

Treatment is usually surgical. The conservative surgical procedures are carried out by Haydon, Novak, and others. The choice between conservative and radical surgery is a problem in each individual case, where age, desire for children, and the extent of the disease are all determining factors. By conservative surgery is meant removing the diseased tissue where possible and preserving as much normal ovary as possible. Dilatation and curettage give no information of a positive nature. Total castration and removal of all possible diseased tissue is necessary in widespread, severe pelvic endometriosis. Radiation therapy can be used to sterilize the ovaries and bring about improvement in symptoms. It may be most useful as a possible adjunct following conservative surgery. It is never indicated without pathological proof of endometriosis. In Haydon's series the following operations were done:

Oophorectomy	233
Salpingectomy	230
Vaginal hysterectomy	225
Resection of transplants	80
Cauterization of transplants	71
Resection of ovaries	72
Appendectomy	111

Ovarian function was retained in 503 of these 569 cases. Of these cases 88 per cent remained symptom free over a period of one to ten years. Haydon's mortality figure was 0. Subsequent pregnancy occurred in 19 cases. Turunen reported on a series of 200 cases of extra-uterine endometriosis, in which radical operations were done in 22 per cent, with 31 per cent of the other women subsequently becoming pregnant.

I have become especially interested in the high incidence of endometriosis since recently reviewing the statistics of the surgical pathology of the Nix Hospital for the years 1942, 1943, and 1944. The pertinent data are included in table 2.

TABLE 2.—*Statistics of Surgical Pathology, Nix Hospital.*

	1942	1943	1944
Total surgical specimens received in the laboratory	1,333	1,227	1,261
Gynecological specimens	444	470	562
Cancer in gynecological specimens	8.5%	9.5%	4.8%
Leiomyoma of uterus	21%	21%	15.6%
Benign tumors of gynecological specimens	20%	14%	13.7%
Endometriosis (of gynecological material)	72—16%	173—24%	80—14%

Among other workers reporting on incidence are those listed in table 3.

TABLE 3.—*Incidence of Endometriosis Reported by Various Workers.*

	Per Cent
Haydon—1934	8.4
Haydon—1940	13.1
Haydon—entire series	9.8
Sanders—1943, private	17.0
Methodist Hospital (Memphis)—1930-1940, charity	3.8
Baptist Memorial Hospital (Memphis)—1939, charity	4.7
John Gaston Hospital (Memphis)—1930-1940, charity	1.3
St. Anthony Hospital (Oklahoma City)—charity	.96
Miami Valley Hospital (Dayton)—charity	2.23
Sturgis (Philadelphia)—1942, hospital as a whole	7.6
Sturgis (Philadelphia)—1942, private major gynecological operations	11.5
Albany Hospital	13.0
Meigs (Boston)—1939, private, all gynecology	16.0
Meigs (Boston)—1939, private, abdominal gynecology	32.0
Mass. Gen. Hospital (Boston)—all cases	5.8

Dr. A. P. Stout of New York on a recent visit here told me that endometriosis was increasing at the Presbyterian Hospital in New York City.

Meigs of Boston also is certain there is a real increase. His reasons for it include:

1. Some surgeons are looking for endometriosis and help the pathologist out by marking suspicious areas well.
2. Women with endometriosis have stigmata of underdevelopment and many are also undersexed.
3. Delay in marriage and delay in pregnancy is noticeable. (Average age of marriage is 26 years.)
4. In a series of primiparae the first baby was born when the mother was 26 or older in 70 per cent (Dr. Goethal's series private cases).
5. Contraception was used in 66 per cent.
6. Sterility appeared in 44 per cent.

Meigs believes that the peritoneum of the ovaries, uterus, and pelvic structures is derived from celomic epithelium. Müllerian ducts arise from celomic epithelium. In de-

velopment some celomic cells may not be used but, under too prolonged and uninterrupted stimulation of hormones—estrin and progestin, may grow into endometrial tissue and result in endometriosis. Those with stigmata of underdevelopment may require much less stimulation. One author, Sturgis of Philadelphia, questions the role of contraceptives, vaginal tamponage, cervical stenosis, glandular therapy, and pregnancy spacing in contributing to this increase in endometriosis.

REFERENCES

1. Cullen, T. S.: Adenomyoma of Uterus, Philadelphia, W. B. Saunders Company, 1908.
2. Haydon, G. B.: A Study of 569 Cases of Endometriosis, Am. Obst. & Gynec. 43:704-709 (April) 1942.
3. Lockyer, C.: Lewis' System of Surgery, Hagerstown, Md. W. F. Prior Company, 11:8, 1929.
4. Lucas, J. F.: Pelvic Endometriosis, Mississippi Doctor, 19: 301-305 (Nov.) 1941.
5. Meigs, J. V.: Endometriosis—A Possible Etiological Factor, Surg., Gynec. & Obst. 67:253-255 (Aug.) 1938.
6. Novak, E.: Gynecological and Obstetrical Pathology with Clinical and Endocrine Relations, Philadelphia, W. B. Saunders Company, 1940, p. 398.
7. Sampson, J. A.: Perforating Hemorrhagic (chocolate) Cysts of the Ovary, Their Importance and Especially Their Relation to Pelvic Adenomas of the Endometrial Type, Arch. Surg. 3:245, 1921; cited by Novak, E.: Gynecological and Obstetrical Pathology with Clinical and Endocrine Relations, Philadelphia, W. B. Saunders Company, 1940.
8. Sanders, R. L.: Endometriosis: Clinical and Therapeutic Considerations, Surgery, 13:224-239 (Feb.) 1943.
9. Sturgis, M. C.: Some Clinical Aspects of Peritoneal Endometriosis, M. Woman's J. 49:295-299 (Oct.) 1942.

THE RELIEF OF PAIN IN OBSTETRICS

A REVIEW OF 1982 CONSECUTIVE DELIVERIES*

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The analysis of 1982 consecutive deliveries has been made as to the effect of the various pain relieving drugs on the occurrence of asphyxia neonatorum. This work has been published from the obstetrician's[4] point of view and is now being considered from that of the anesthetist.

Resident obstetricians and permanent staff members supervised all deliveries. Operative technics were used only on definite obstetric indication; for example, "Routine outlet forceps" was not used. Resident medical anesthetists and members of the permanent staff supervised the analgesia and anesthesia for each patient. As far as possible, the treatment of each case was individualized and an attempt was made to suit the drugs and methods of administration to the indications of the obstetrical procedure as well as to the patient's requirements for comfort.

In many of the uncomplicated pregnancies at term, the patient received moderate amounts of nonvolatile analgesic drugs, usually opiates, during the early part of the first stage of labor. Later in the first stage and during the second stage of labor, nitrous oxide was commonly used as an inhalation analgesic. It was given intermittently with the contractions by a semiclosed technic. Nitrous oxide alone or complemented by cyclopropane or ether was used at the time of delivery in concentrations such as to produce light surgical anesthesia as opposed to analgesia. On occasion, ethylene was used to supplement nitrous oxide at the time of delivery, but was never used intermittently.† For a few operative procedures, nitrous oxide alone or complemented by cyclopropane or ether was used. For operative deliveries, cyclopropane and occasionally ether or chloroform were used. Ether and chloroform were chiefly used when conditions demanded complete relaxation for operative obstetrics or in cases of emergency when other equipment was unavailable.

The details of each case were transferred from the anesthetic record and the obstetrical chart to punch cards. The data was analyzed by the Hollerith Punch Card System.

DISCUSSION

The depressant effects of the drugs used in association with the obstetrical procedures are classified as to the response of the child at the time of delivery. As in the previous paper,[4] mild depression is considered as that state in which respiration is delayed but spontaneous; moderate depression, in which artificial resuscitation easily restores respiratory function; severe depression, in which marked cyanosis, or pallor and evidence of shock, require artificial resuscitation plus other restorative measures to reestablish the function of the higher centers.

Table 1 offers evidence of the depressant effect on the child of nonvolatile drugs (heroin, morphine, scopolamine, barbiturates) used in the early stages of labor.

The pharmacologic action of the barbiturates assures us of central depression where the relief of pain is accomplished only by the induction of sleep.[6] To accomplish the desired effect large or repeated doses must be used. The central depressant effect on respiratory function, therefore, is necessarily

TABLE 1.—*The Relation of Asphyxia Neonatorum to Nonvolatile Drugs.*

	Spontaneous Deliveries					Operative Deliveries				
		Asphyxia					Asphyxia			
	No. Cases	None %	Mild %	Moderate %	Severe %	No. Cases	None %	Mild %	Moderate %	Severe %
Without nonvolatile drug	1068	91.55	5.6	2	0.85	316	81.4	7.6	7.2	3.8
With nonvolatile drug	278	82.5	6	10	1.5	309	67	10.4	17.1	5.5

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*Cases from the State of Wisconsin General Hospital, Madison, Wisconsin.

†The hydrocarbons such as ethylene, ether, and cyclopropane should never be used intermittently with high concentrations of oxygen, particularly by the semiclosed technic, because of the fire hazard involved.

a strong factor in influencing fetal respiration. Frequently scopolamine is combined with the barbiturate but here again the effect is not pain relief but euphoria.[1]

The opiates, according to most obstetricians, should not be administered less than four to five hours before the anticipated time of delivery because of their respiratory depressant effects on mother and baby.

It is almost impossible to judge the progress of a patient in early labor as to how long the first stage will last, the force of uterine contractions, and how much pain the patient will have with the contractions. These facts make the administration of nonvolatile drugs for sedation and relief of pain early in labor an uncertainty at best. If the obstetrician's judgment is fairly accurate, the patient may be made relatively comfortable until it is time to receive some inhalation analgesia with the "bearing down" process in the second stage. If the labor is overly rapid, the depressant effects of the drug will not have had time to wear off and the child may be born with marked central depression. If the drug administered is insufficient for an extended labor, the patient is left actively aware of her discomfort, and if repeated in the dangerous period just before delivery it interferes with prompt spontaneous respiration.

TABLE 2.—*The Relation of Asphyxia Neonatorum to Volatile Drugs.*

	Spontaneous Deliveries					Operative Deliveries				
		Asphyxia					Asphyxia			
Agent	No. Cases	None %	Mild %	Moderate %	Severe %	No. Cases	None %	Mild %	Moderate %	Severe %
Nitrous oxide	997	90	6	3	1	118	79	7.5	9.5	4
Nitrous oxide—ethylene	36	91.5	5.3	3	0	97	82	9.5	4	4
Nitrous oxide—cyclopropane	111	88.5	7	3.5	1	208	81	7.5	8.5	3
Cyclopropane	22	91	0	9	0	159	63.5	10.5	19	7
Others	27	89	7	4	0	41	68	2.5	17	12.5
None	165	86	6	5.5	2.5					

Table 2 shows the effect on the child of the volatile anesthetic drugs used during parturition.

The two most commonly used and abused inhalation agents are nitrous oxide and ethylene. It has been demonstrated that nitrous oxide is effective as an analgesic in concentrations as low as 35 per cent.[4] When used as an analgesic with each uterine contraction, nitrous oxide has proved very satisfactory. In 50 cases where this technic was used from three to twelve hours, there was very little increase in moderate and severe asphyxia.

As anesthetic agents, both nitrous oxide and ethylene produce a minimum of anesthetic effect when used to the full safe extent of potency (80 per cent). Under certain circumstances, 100 per cent nitrous oxide can be safely used for one or two breaths at the beginning of a contraction while there is sufficient oxygen in the tissues to prevent damage. This technic can be used only in cases where both mother and fetus are normal.

Table 2 would indicate that the limitations of safe anesthesia without hypoxemia are limited to the class of spontaneous labor. When nitrous oxide was used for any operative delivery, the percentage of unaffected infants dropped from 90 to 79. When nitrous oxide was supplemented by a more potent agent for operative delivery, the results were immediately improved.

In a small group of spontaneous deliveries, the use of nitrous oxide was followed by increased asphyxia when the progress of labor was very rapid, contractions were very strong, and delivery occurred in less than ten minutes. With the tendency to "smother" the progress of labor and relieve the patient's pain, until a sterile delivery field was set up or the obstetrician was at hand, the agent was "used" beyond its safe limitations.

Some anesthetists prefer to use chloroform, ether, or cyclopropane as a single agent for these cases, but it must be remembered that as soon as control has been established over the delivery, the anesthetic should be lightened and the baby well oxygenated before delivery is allowed to be completed. When labor is tumultuous and delivery is precipitous, immediate control often can be obtained by using the 100 per cent nitrous oxide technic for the first two or three breaths, immediately followed by a safe mixture of nitrous oxide (80 per cent) and oxygen (20 per cent). If this will not control the pain and allow the obstetrician to perform a normal delivery, then an agent which is more potent and immediately effective (for example cyclopropane) should be added to the mixture to accomplish the delivery safely and satisfactorily.

Table 2 would indicate that those agents which are effective in low concentrations and can be used with higher concentrations of oxygen (cyclopropane, ether, and chloroform) compare favorably with the less potent ones in the group of spontaneous deliveries. An exception occurred when the duration of administration raised the incidence of asphyxia in the mild and moderate group. In 200 operative deliveries, including cesarean section, podalic version, breech extraction, delivery of eclamptic, cardiac, and tuberculous patients, and other abnormal circumstances, the degree of moderate and severe asphyxia was considerably increased. This may be explained by a number of factors both obstetric

and anesthetic. The obstetric factors, namely, maternal health, prematurity, duration of labor, and complications of parturition, have been discussed elsewhere.[3] Excluding these obstetric factors, it may be assumed that because this group of patients was anesthetized with a more potent agent, asphyxia was proportionately increased with the duration of administration; that is, degree of tissue saturation. Many of the babies in this group were born, to all appearances, pink and well oxygenated, but because of the central depressant effect of the drug, or prenatal or labor complications which necessitated operative delivery, failed to respond normally.

When the mother is depressed from nonvolatile drugs, the newborn child must have an immediate supply of an oxygen rich atmosphere, insured by careful maintenance of an adequate airway or artificial respiration if necessary. When high concentrations of a volatile drug limit the supply of oxygen to the mother and fetus, temporary or permanent cerebral damage to the mother or child can be prevented only by supplying adequate oxygen to the mother before delivery and to the child at birth. Children born well oxygenated but with delayed respiratory function, caused by saturation of the higher center with a volatile drug, require artificial respiration and a free airway until the effects of the drug have worn off.

The criteria for a good agent as advanced by Guedel,[2] far surpass the qualifications of any one agent that we have, whether volatile, nonvolatile, analgesic, or anesthetic. Nevertheless, in our armamentarium, we have a number of agents which, although limited in scope or cast aside for some unfavorable side action, when intelligently combined will safely and efficiently provide comfort for the mother during labor.

A most important factor, which is difficult to evaluate by any statistical means, is the technic of administration of any drug. This is controlled by the individual anesthetist's abilities and his capacity to balance the probable effects of a drug against the safe physiologic tolerance of the patient under varying circumstances. Johnson[3] has emphasized the importance of having the assistance of a medical anesthetist, particularly in the management of the more difficult obstetric cases. He points out that an anesthetist who is familiar with the various obstetric procedures and who can safely administer the various drugs necessary for the relief of pain in all circumstances is a factor in reducing the morbidity and mortality in childbirth.

SUMMARY

1. A review of 1982 consecutive deliveries has been made as to the relation of asphyxia neonatorum to the effects of the volatile and nonvolatile drugs used for the relief of pain in labor.

2. The incidence of fetal asphyxia was increased with the administration of nonvolatile drugs in the early stages of labor.

3. All inhalation agents used for spontaneous delivery compared favorably.

4. The use of nitrous oxide or ethylene increased the incidence of asphyxia when used beyond safe limits of potency.

5. Nitrous oxide or ethylene used to safe limits and then supplemented by a more potent agent gave the most favorable results.

6. Cyclopropane and other more potent inhalation agents increased the incidence of asphyxia in proportion to the degree of tissue saturation.

7. Complications of pregnancy and labor, particularly those necessitating operative delivery, increase the incidence of fetal asphyxia.

CONCLUSIONS

Asphyxia neonatorum may be the result of the complications of pregnancy and labor. It frequently involves poor diagnosis and management of the existing conditions by the obstetrician. It often involves the misapplication of depressant drugs through the failure of the anesthetist and obstetrician to recognize the physiologic disturbances and changes involved in the progress of labor, thus acquiring the relief of pain at the expense of safety. The choice of an anesthetic agent is not as important as its proper administration and individualization to the existing obstetric conditions. It cannot be emphasized too strongly that only by close cooperation between the obstetrician and the anesthetist can the mother and child be safeguarded against the hazards of childbirth.

REFERENCES

1. Cole, W. C. C., Kimball, D. C., and Daniels, L. E.: Etiologic Factors in Neonatal Asphyxia, J. A. M. A. **113**:2038-2044 (Dec. 2) 1939.

2. Guedel, A. E.: The Use of Nitrous Oxide in Obstetrics, Am. Year Book of Anesthesia and Analgesia, New York, Surgery Publishing Company, 1915, p. 227.

3. Johnson, H. W.: Delay in Labor Caused by Mild Degrees of Bandl's Ring, Texas State J. Med. **37**:538-540 (Dec.) 1941.

4. Lund, C. J.: Prevention of Asphyxia Neonatorum; Study of Etiologic Factors Observed in 2,000 Consecutive Deliveries, Am. J. Obst. & Gynec. **41**:934-948 (June) 1941.

5. Seevers, M. H., Bennett, J. H., Pohle, H. W., and Reinardy, E. W.: The Analgesia Produced by Nitrous Oxide, Ethylene and Cyclopropane in the Normal Human Subject, J. Pharmacol. & Exper. Therap. **59**:291-300 (March) 1937.

6. Tatum, A. L.: The Present Status of the Barbiturate Problem, Physiol. Rev. **19**:472-502 (Oct.) 1939.

Most of our cases of active pulmonary tuberculosis in years to come will develop from the group of school children who are reactors to the tuberculin test today. It is important to stress that all such reactors should be carefully watched, x-rayed annually, and, wherever possible, the source of infection traced to prevent further spread of the disease. —Lewis S. Jordan, M. D., *Journal-Lancet*, April, 1945.

RHINOPLASTIC CORRECTION OF COMMON NASAL DEFORMITIES

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Rhinoplastic surgery dates back to antiquity. The birthplace of this art is indefinite, but it probably started in India. However, there is evidence that operations were performed by the Egyptians as early as 3500 B. C.[5] During the Crusades the knowledge of this type of surgery was introduced into Europe. In 1597 Tagliacozzi[14] published a lengthy treatise describing several rhinoplasty operations, but giving special prominence to his own technique. All of these procedures were designed for reconstruction, as amputation of the nose was a common punishment for criminals and prisoners. During World War I, rhinoplastic surgery was again resuscitated. Joseph[7] is considered the father of modern rhinoplastic surgery which is concerned with the correction of nasal deformities where loss of tissue is not involved.

This operative procedure is fairly simple and the technique is not difficult to perfect, but it has been avoided by most otolaryngologists. A few of the extreme disfiguring cases have been referred to plastic surgeons, but many of the common deformities have been neglected. Nasal plastic surgery belongs in the field of rhinology as it is an intranasal operation, and the rhinologist should be the most capable of retaining normal nasal physiology. Credit should be given Fomon[5] for his work in stimulating the otolaryngologists' interest in this field. This presentation will be limited to deformities of the dorsum, tip and nasal septum. Conditions involving loss of tissue and post-inflammatory changes such as the saddle nose will not be discussed.

The common nasal deformities include: (1) hump nose, (2) elongated nose, (3) bulbous nasal tip, (4) drooping nasal tip and (5) deflected nose. The first four are usually congenital in origin but may be due to trauma or previous infection. These deformities occur about equally in each sex, but more women seek correction. The deflected nose is almost invariably caused by trauma and is always accompanied by a deformity of the nasal septum. It is more common in the male but, as women are now subjected to more automobile, airplane and machinery accidents, this deformity is becoming more common in the female.

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The nose is the most prominent part of the face and is more subject to injury than the remainder. Any abnormality there is more noticeable than in any other part of the body. Often the defect interferes with normal nasal function and causes some impairment of health. Many persons are merely self-conscious about their deformity and develop an inferiority complex which handicaps them in normal social intercourse.

The supporting framework of the external nose is about two-thirds cartilage and one-third bone. The upper third of the nose is formed by the two nasal bones and the frontal processes of the maxilla. The middle third is formed by the upper lateral cartilages (or lateral nasal cartilages) which fuse medially with the quadrilateral septal cartilage. Ersner[4] describes these cartilages as exerting a guy rope action on the septum. He states that the correction of a deformity of the septal cartilage must include the release of this traction. The lower third of the nose is formed by the greater alar cartilages (or lower lateral cartilages), fibrous tissue and small sesamoid cartilages. The septum is about one-third cartilage and two-thirds bone. Anteriorally the septal cartilage fuses with the upper lateral cartilages and is connected with alar cartilages by fibrous tissue. Above, the septum is formed by the perpendicular plate of the ethmoid, below and posteriorally by the vomer and the nasal crest of the maxilla. (Fig. 1 *a*.)

The rhinoplastic approach is employed in the correction of all these deformities with modification of the procedure as indicated for each individual case. Local infiltration (1 per cent procain hydrochloride with six drops of 1:1000 epinephrine hydrochloride to the ounce) is the anesthetic of choice. Local application of cocaine crystals is used intranasally. The incisions are made intranasally between the alar and upper lateral cartilages. These are joined medially, extended around the nasal tip and back to the nasal spine of the maxilla to transfix the columella. The skin is elevated from the underlying structures by scissor or knife dissection and the periosteum is elevated over the nasal bone. The upper lateral cartilages are cut free from the septum and the dorsal deformity can be removed. This can be accomplished by using Joseph's saws or with a chisel. Any elongation or deformity of the cartilaginous tip is then corrected. The frontal processes of the maxilla must be cut free and fractured medially to correct the flat dorsum after removal of the hump. This is usually performed intranasally with saws but can be accomplished by chisels used externally. The introduction of a 3 mm. chisel through the skin leaves such

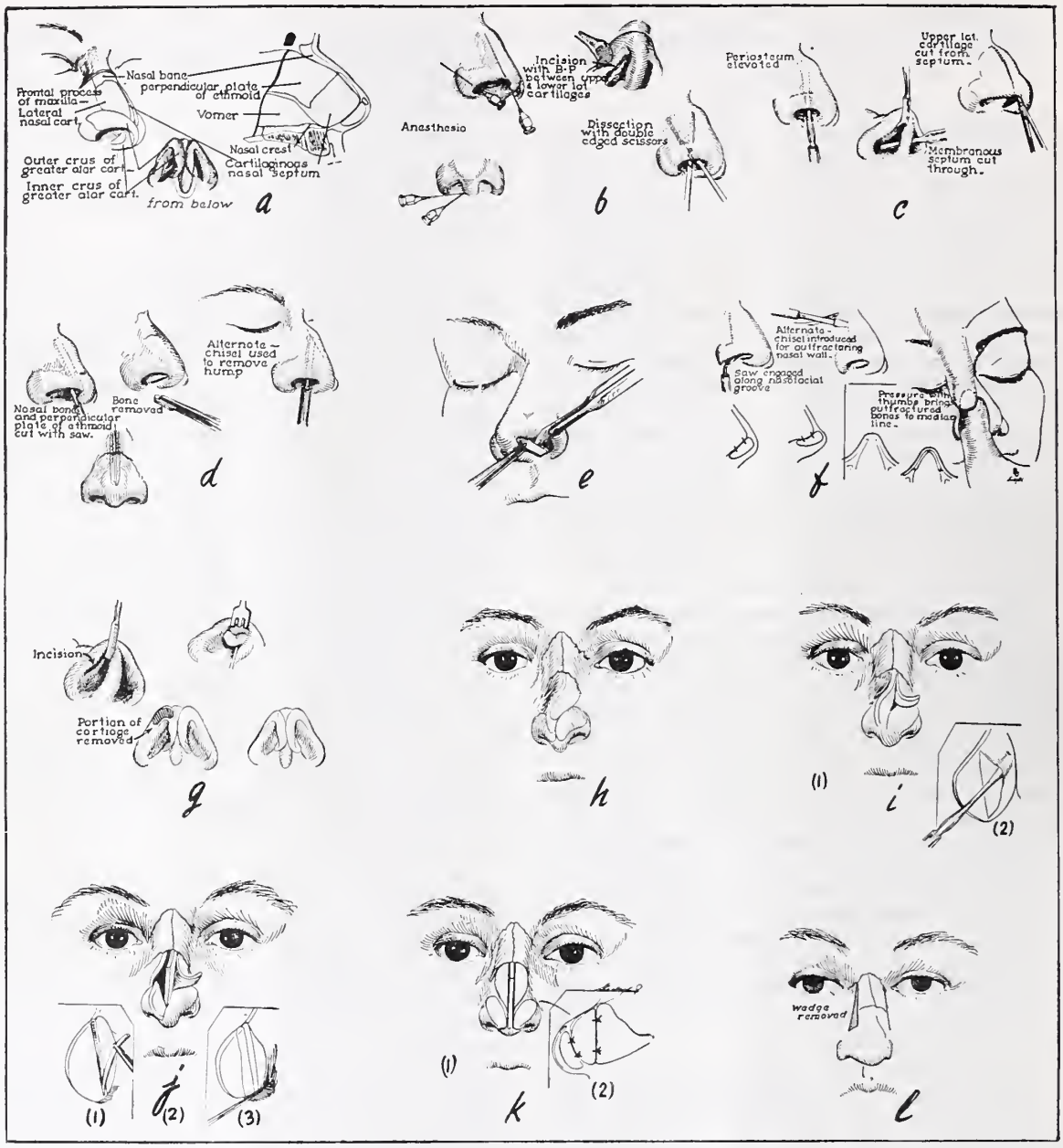


Fig. 1. Schematic drawings showing anatomical and surgical factors in rhinoplastic procedure for the correction of various nasal deformities.

a. Framework of external nose from lateral view and from below. Lateral view of nasal septum.

b. Local infiltration of dorsum, lateral side and columella with 1 per cent procain. Inter-cartilagenous incision between alar and upper lateral cartilages. Scissor dissection of skin from underlying structures.

c. Elevation of periosteum over nasal bones. Extension of inter-cartilagenous incisions around nasal tip and back to transfix and columella. Upper lateral cartilage cut free from septal cartilage.

d. Removal of dorsal deformity with saw. Removal of deformity with chisel. View showing flattened dorsum after removal of hump.

e. Correction of deformity of cartilagenous nasal tip.

f. Frontal process of maxilla freed by sawing along nasofacial groove. Fracturing frontal process by chisel used externally (a 3 mm. chisel is used, in this drawing a larger chisel is shown for purpose of demonstration). Fracturing frontal processes toward median line by pressure with thumbs. Diagrams showing suturing of columella to septum, and position of frontal processes before and after infraction.

g. Narrowing nostril. Incision along border of alar cartilage. Cartilage dissected free and a wedge removed. Nostril narrowed after removal of wedge of cartilage.

h. Deformity of upper lateral and alar cartilages as seen in the deflected nose.

i. (1) Upper lateral cartilage cut free showing deformity of septal cartilage. (2) Elevation of perichondrium for Seltzer operation.

j. (1) Removal of strip of septual cartilage at point of deformity. (2) Septum as seen after removing this cartilage strip. (3) Lateral view of septum showing removal of strip of cartilage.

k. (1) Position of septum and upper lateral cartilages after correction of deformity. (2) Lateral view showing suturing of septal cartilage and columella.

l. Wedge of bone removed to correct pronounced deflection of nasal bones.

a small scar that it is not noticeable. Allan[1] makes the point of introduction through the skin of the lower lid, which does not show postoperative scarring. Although most surgeons use saws, Straatsma[13] prefers the chisel, stating that there is always a little comminution along the fracture line which prevents the ledge formation present when the frontal process is sawed. The columella is sutured to the septum by two heavy silk sutures. The first of these can be used to raise or lower the tip as indicated. The anterior nasal cavity is packed loosely and a dental compound splint is used for external immobilization. (Figs. 1 *b, c, d, e f.*)

This procedure is applicable to the correction of the hump nose, the elongated nose and the drooping nasal tip. The bulbous nasal tip is caused by an over-development of the alar

FIG. 2. Lateral views, before and after operation, of a patient with hump nose and dropping of nasal tip.

cartilages. The correction of this deformity is accomplished by removing a wedge from the alar cartilage. The Joseph[7] technique is probably the most widely employed. (Fig. 1 *g.*)

The deflected nose presents a more complicated problem. There is usually some combination of the other deformities plus a deformity of the septum. The rhinoplasty corrects the external deformity but the septal correction must be made according to its location. Bolotow[3] states that if the deformity is posterior to an imaginary line drawn from the nasal spine of the maxilla to the nasal spine of the frontal bone, a submucous resection will be sufficient. If the deformity lies anterior to this line, some plastic procedure must be performed on the septal cartilage. Numerous operations have been devised. Metzenbaum's[9] method of cross hatching the cartilage has retained its popularity. Joseph[8] removed a wedge of cartilage from the base and immobilized the septum with a silk suture passed through a drill hole in the pyriform process. Blair[2] freed the septum and anchored it to a bicuspid tooth with a silver wire. Seltzer's[11] method of elevating the perichondrium, removing a small strip of cartilage at the point of convexity and suturing the cartilage has given satisfactory results. The septum is free from the floor of the nose and the suturing of the cartilage allows a hinge-like action. The septum is kept in position by some type of intranasal splint until it is healed. (Figs. 1 *h, i, j, k.*) In cases of pronounced deflection it is necessary to remove a wedge of bone from the broad concave side. (Fig. 1 *l.*) Sparer[12] has simplified the technique by sawing on each side of a clamp and removing the wedge with the instrument.

The correction of three of these deformities is illustrated by the accompanying photographs. Figure 2 shows lateral views, before and after operation, of a patient with hump nose and dropping of nasal tip. Figure 3 shows lateral views, before and after operation, of a patient with elongated nose. Figure 4 shows views, front and lateral, of a patient before and after correction of a deflected nose.

Complications in rhinoplastic surgery are not common. Operations should never be per-

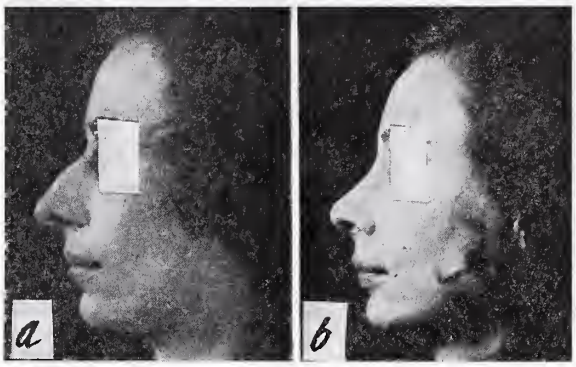


FIG. 3. Photographs of patient with elongated nose. Lateral view before and after operation.

formed in the presence of any nasal infection. The skin of the nose and face is prepared first with green soap and water, then with tincture of mecresin; the head, face and neck are draped with sterile linen and a sterile technique is followed. When infections occur they will usually respond to sulfonamide or penicillin therapy, but occasionally external drainage is necessary. All patients have a rather extensive swelling and ecchymosis about the eyes, but this starts subsiding in three or four days. Unsatisfactory results are avoided by careful selection and analysis of cases, and by evaluation of the proper procedure to employ. Many patients get a complex about a minor condition of the nose and desire surgical correction. Only cases with noticeable external deformities or impaired nasal function should be considered.

Poor results are usually due to failure to correct one deformity occurring in combination with another or, as Safin[10] points out, failure to reconstruct the rest of the nose after removal of the primary deformity. Griesman[6] states that elevation of the skin from the underlying cartilage and bone is followed by scar formation which interferes with the action of muscles of the nose used in facial expression. He advocates that the separation be made as close as possible to the bone

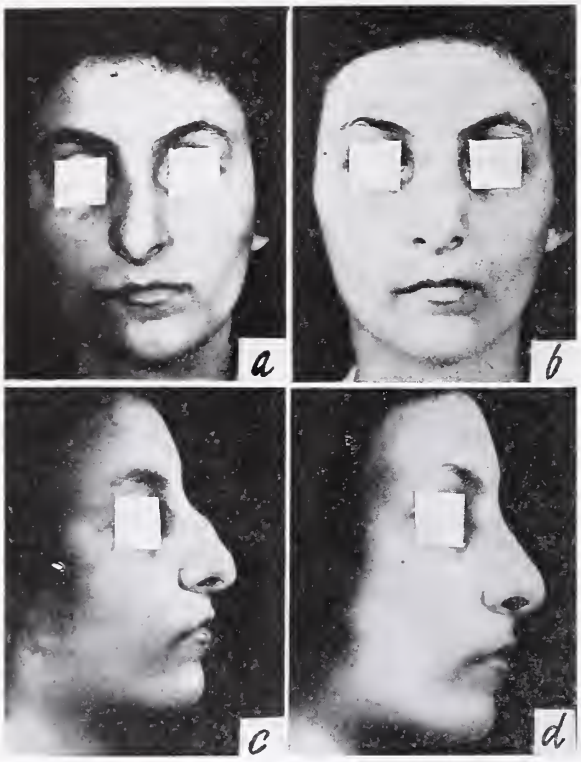


FIG 4. Photographs, front and lateral views, before and after operation, of a patient with a typical deflected nose following unreduced fracture. *a*. Front view before operation; *b*. front view after operation; *c*. profile before operation; *d*. profile after operation.

or cartilage. Meticulous technique and good surgical judgement are essential in rhinoplastic surgery. A person submitting to this operation is expecting correction of a deformity. Complications with disfiguring results are not tolerated well by this group of patients.

SUMMARY

1. Although rhinoplastic surgery is an old procedure, many rhinologists have neglected this operation.

2. The rhinoplastic approach is a useful procedure for correction of several common deformities of the nose.

3. The deflected nose is accompanied by a deformity of the nasal septum, and the upper lateral cartilages exert a guy rope traction on the septal cartilage.

4. The Seltzer operation is the choice of procedure for the correction of deformities of the septal cartilage.

5. Complications are infrequent. Unsatisfactory results are avoided by careful selection of patients and evaluation of the correct surgical procedure.

REFERENCES

1. Allan, W. B.: Stated during instruction to resident staff, Manhattan Eye, Ear and Throat Hospital, New York, N. Y., 1942.
2. Blair, V. P., and Brown, J. B.: Nasal Abnormalities, Surg. Gynec. and Obst. 53:797 (Dec.) 1931.
3. Bolotow, N. A.: Surgical Treatment of Nasal Obstruction. Arch. Otolaryng. 40:198-202 (Sept.) 1944.
4. Ersner, M. S.: Reconstruction of the Deformed Nasal Septum, Arch. Otolaryng. 39:476-484 (June) 1944.
5. Foman, S.: The Surgery of Injury and Plastic Repair. Williams and Wilkins Co., Baltimore, Md. 1939.
6. Griesman, B. L.: Muscles and Cartilages of the Nose from the Standpoint of Typical Rhinoplasty, Arch. Otolaryng. 39: 334-341 (Apr.) 1944.
7. Joseph, J.: Bietraege zur Rhinoplastik, Berl. Klin. Wchnschr., 46:470, 1907.
8. Joseph, J.: Beitraege zur Totalen und Partiellen Rhinoplastik Nebst einem Vorschlage zur Freien Hautueberpflanzung. Klin. Wchnschr., 1:678 (Apr.) 1922.
9. Metzenbaum, M.: Replacement of Lower End of Dislocated Septal Cartilage Versus Submucous Resection of Dislocated End of Septal Cartilage, Arch. Otolaryng. 9:282 (Mar.) 1929.
10. Safain, J.: Failures in Rhinoplastic Surgery. Amer. J. of Surg. 50:274-280 (Nov.) 1940.
11. Seltzer, A. P.: The Nasal Septum. Arch. Otolaryng. 40: 433-444 (Dec.) 1944.
12. Sparer, W.: Simplified Method of Removing Triangular Wedge of Nasal Bone in Plastic Correction of Lateral Deviation of Nose, Arch. Otolaryng. 33:666 (Apr.) 1941.
13. Straatsma, C. R.: Stated during lecture to resident staff, Manhattan Eye, Ear and Throat Hospital, New York, N. Y., 1942.
14. Tagliacozzi, G.: De Curtorum Chirurgia per Insitionem Libri Duo. Venetiis, G. Bindonous, 1597.

1304 Walker Avenue.

STREPTOMYCIN BEING STUDIED

A new drug, streptomycin, companion to penicillin as a killer of bacteria, is being studied and undergoing tests by the Army Medical Department to determine its suitability as a germ killer in saving the lives of wounded and sick American soldiers.

The new drug shows possibilities which may prove to be as important to the medical profession as was the discovery of penicillin. Streptomycin is a killer of gram-negative bacteria, such as tuberculosis, cholera, dysentery, typhoid, tularemia, and salmonella food poisoning. Penicillin is a killer of gram-positive bacteria, such as pneumococcus, streptococcus, staphylococcus, gonococcus, and syphilis.

Even though the new drug is still in the laboratory stage, some is being produced and small quantities are being made available to the Medical Department for experimental purposes, according to Brigadier General Hugh J. Morgan, Chief Consultant in Medicine to Major General Norman T. Kirk, the Surgeon General.

Since streptomycin and penicillin resemble each other in many respects, General Morgan pointed out that experience gained in the production of penicillin will aid materially in the production of the new drug. The production process, however, is slow and tedious and it will be some time before the drug is available in any quantity, he said. just as it took more than two years to bring penicillin into production for general use.

Dr. Selman A. Waksman of the Department of Microbiology of the New Jersey Agriculture Experiment Station at Rutgers University, New Brunswick, N. J., is given credit for the discovery of streptomycin.—S. G. O. Notes, Aug. 15, 1945.

TUBERCULOSIS IN SELECTED GROUPS

HOWARD E. SMITH, M. D.
AUSTIN, TEXAS

The purpose of a case finding program is the discovery of unrecognized cases of tuberculosis. Such a program should be directed toward the population groups known to possess a high incidence of the disease. Although the logical approach to the examination of the more desirable population and occupational brackets should involve the factors of economy and ease with which these groups may be reached, many programs ignore these signal points.

Emphasis has been placed throughout the country during the past two decades on the examination of school children. In the schools large numbers of the population could be easily reached. In fact, school children provide the most accessible body of all the population. From the point of view of economy the school child is another story. A casual appraisal of the results of surveys for tuberculosis among the many thousands of children in the public schools, readily convinces the public health worker that this practice of detecting cases in cost per case is prohibitive, where standard large size x-ray films are used for checking purposes. Less expensive means of examination were necessary. The use of large x-ray films involving school children in a case finding program cannot be justified.

The function of education must assume the responsibility for the continuation of such a program. The thought naturally lends itself if education could be more adequately secured through less expensive media. Basically many programs have lost sight of the main advantage of surveys of school children—the opportunity to enter family groups to ferret out the original source of the child's infection.

The next step in the evolution of case finding efforts was centered primarily among family members of known infectious cases. Since tuberculosis occurs fundamentally as a family epidemic, large numbers of new cases were uncovered through this mode of attack. Except for a few areas having ample health services, shortages of field nursing personnel have restricted this program. This type of program is applied to only the known cases in family groups. There are many tuberculosis cases in families scattered in the general population which are entirely unsuspected. It has been necessary to supplement control facilities with other case finding procedures.

The development of mass radiography through the use of the miniature film as a screening device has opened new portals for control of tuberculosis. Mass radiography is not a method of final diagnosis and must not be treated as such. This system is much cheaper than taking hundreds of full-sized films, and then miniature pictures give a general indication of whether or not the chest is normal and whether a large film is desirable for more adequate inspection. Many latent cases of tuberculosis are discovered with few or no symptoms. It has been recognized for a long time that the examinations of apparently healthy people bring to light the early cases. To wait until symptoms appear before tuberculosis is recognized results in the detection of few early cases, with the majority in an advanced condition. The time involved in treatment and the cost of care for advanced tuberculosis cases is greater than that of an early tuberculosis victim.

The evolution of the case finding methods to be used in tuberculosis control must take into consideration qualitative as well as quantitative factors. From the public health point of view, the choice between large and small film techniques is overwhelmingly in favor of the latter when large groups of persons are to be examined.

There are several sizable segments of the population which may be easily reached by mass radiography. The more obvious groups are: (1) persons admitted to general hospitals, special hospitals such a mental, and outpatient clinics; (2) employees in large and small industrial plants of the State; (3) special occupational groups, such as food handlers and domestic servants where health cards are required for employment. By using portable equipment combinations on these population segments they may be successfully examined. The examination of admissions to hospitals in New York, Chicago, and Detroit has already proved the efficacy of this approach to tuberculosis.[4] The findings of a widely scattered survey among certain population groups in the United States, showing the prevalence of tuberculosis, are given in table 1.

TABLE 1.—*Prevalence of Tuberculosis in Various Population Groups.*

West Side San Antonio (Gould)	5.0%	Latin-American
West Side San Antonio (Gould)	5.0%	Anglo-American
Negroes, New York	3.4%	
Relief, New York	4.1%	
Pre-employment, Indiana	4.2%	
Industrial, U. S. Public Health Service	1.3%	
College Students, New York	2.3%	
High Schools, New York	0.8%	
Military Rejectees	1.0%	

In Texas several of the larger cities have local ordinances requiring the tuberculin testing of all applicants for food handler's permits. If a positive test is found in an applicant a roentgenogram of the chest is required

Prepared for the program of the Section on Public Health, State Medical Association of Texas, Galveston, May 8-10, 1945, cancelled because of war conditions.

before a permanent permit is issued. Some of the places with an ordinance of this type were unable to examine all needed applicants because local facilities did not permit. The State Health Department was asked to complement the local effort. Table 2 reveals the number of food handlers examined and the incidence of tuberculosis found during the past eighteen months.

TABLE 2.—*Incidence of Tuberculosis in Food Handlers.*

County	Positive Cases	Total Food Handlers	Per Cent
Nueces	33	216	15.2%
Cameron	15	168	8.9%
Webb	44	285	15.4%
Tom Green	28	561	4.9%
Brazos (A. & M. College)	17	186	9.1%
	137	1416	9.6%

Although the number of persons examined is not large the number of cases found is significant. The 9.6 per cent of tuberculosis cases uncovered exceeds that of any previous survey of an occupational group. The results also suggest the feasibility of examinations of other groups such as domestics and school teachers. Other groups that have more than ordinary contact with people should prove themselves suitable for mass examination for the detection of unrecognized cases of tuberculosis. With the advent of photofluorography and use of miniature films it is now possible to discover unknown cases and convert the patients into an asset to society. The development and coordination of other phases of tuberculosis control, education, treatment and rehabilitation with case finding will reduce the great white plague to a minor menace to society.

REFERENCES

1. Bloch, R. G., and Tucker, W. B.: The Indispensability of Routine X-ray Examinations of the Chest in a General Clinic, Am. Rev. Tuberc. 50:405-417 (Nov.) 1944.
2. Childress, W. G.: Tuberculosis Among Hospital Personnel, Am. Rev. Tuber. 49:501-509 (June) 1944.
3. Childress, W. G., Debbie, A. G., and Harmon, E. L.: Tuberculosis Case Finding by General Hospitals, J. A. M. A. 122:1063-1065 (Aug. 14) 1943.
4. Hodges, F. J.: Fluographic Examination of the Chest as a Routine Hospital Procedure, Radiology 38:453-461 (April) 1942.
5. "Sore Thumb," Booklet by San Antonio Health Department and Bexar County Tuberculosis Association.

MISCELLANEOUS

COMING MEETINGS AND CLINICS

State Medical Association of Texas. Dr. H. F. Connally, Waco, President; Dr. Holman Taylor, 1404 W. El Paso St., Fort Worth, Secretary.

American Medical Association (House of Delegates), Chicago, December 3-6. Dr. Herman L. Kretschmer, Chicago, President; Dr. Olin West, 535 North Dearborn Street, Chicago, Secretary.

Southern Medical Association, Cincinnati, November 12-15. Dr. E. Vernon Mastin, St. Louis, Mo., President; C. P. Loranz, Empire Building, Birmingham, Ala., Secretary-Manager.

Southwest Allergy Forum. Dr. Ralph Bowen, Houston, President; Dr. George Owen, 910 North State St., Jackson, Miss., Secretary.

Texas Association of Medical Anesthetists. Dr. E. D. Embree, Houston, President; Dr. R. A. Miller, 1415 Nix Professional Building, San Antonio, Secretary.

Texas Association of Obstetricians and Gynecologists, San Antonio, November 17. Dr. Allen Stewart, Lubbock, President; Dr. Julius McIver, 714 Medical Arts Building, Dallas, Secretary.

Texas Chapter American College of Chest Physicians. Dr. S. E. Thompson, Kerrville, President; Dr. Elliott Mendenhall, Dallas, Secretary.

Texas Club of Internists. Dr. Merritt B. Whitten, Dallas, President; Dr. Julian C. Barton, 414 Navarro St., San Antonio, Secretary.

Texas Dermatological Society. Dr. Lewis Pipkin, San Antonio, President; Dr. Duncan O. Poth, 1230 Nix Professional Building, San Antonio, Secretary.

Texas Hospital Association. Lawrence Payne, Baylor Hospital, Dallas, President; Miss Madelyne Sturdavant, 5709 Velasco, Dallas, Secretary.

Texas Neuropsychiatric Association. Dr. Titus Harris, Galveston, President; Dr. Fred Rogers, Dallas, Secretary.

Texas Ophthalmological and Otolaryngological Society, San Antonio, December 7-8. Dr. M. K. McCullough, Dallas, President; Dr. E. D. Dumas, San Antonio, Secretary.

Texas Orthopedic Society. Dr. E. A. Cayo, San Antonio, President; Dr. Edward Smith, Houston, Secretary.

Texas Pediatric Society, Galveston, November 11-12. Dr. Frank H. Lancaster, Houston, President; Dr. John Ashby, Dallas, Secretary.

Texas Public Health Association. Major Lewis Dodson, C. E., Headquarters Eighth Service Command, Dallas 2, Texas, President.

Texas Radiological Society. Dr. T. B. Bond, Fort Worth, President; Dr. R. P. O'Bannon, 650 Fifth Ave., Fort Worth, Secretary.

Texas Railway and Traumatic Surgical Association. Dr. W. B. Reeves, Greenville, President; Dr. Ross Trigg, First National Bank Building, Fort Worth, Secretary.

Texas Society for Mental Hygiene. Dr. Charles W. Castner, Capitol Building, Austin, President; Miss Jennie S. Wilmot, University of Texas, Austin, Secretary.

Texas Society of Gastro-enterologists and Proctologists. Dr. James J. Gorman, El Paso, President; Dr. George M. Underwood, 4105 Live Oak Street, Dallas, Secretary.

Texas Society of Pathologists, Dallas, Jan. 27, 1946. Dr. Paul Brindley, Galveston, President; Dr. John J. Andujar, 1300 W. Cannon Ave., Fort Worth, Secretary.

Texas State Heart Association. Dr. Victor E. Schulze, San Angelo, President; Dr. Walter B. Whiting, Wichita Falls, Secretary.

Texas Surgical Society, San Antonio, October 8-9. Dr. Sam Weaver, Dallas, President; Dr. Walter Stuck, 1426 Nix Professional Building, San Antonio, Secretary.

Texas Tuberculosis Association. Dr. J. B. White, Amarillo, President; Miss Pansy Nichols, Austin, Executive Secretary.

Third, Panhandle, District Medical Society. Dr. D. D. Cross, Lubbock, President; Dr. George Powers, Amarillo, Acting Secretary.

Fourth District Medical Society, Brownwood, 1945. Dr. V. E. Schulze, San Angelo, President; Dr. J. M. Horn, Brownwood, Secretary.

Fifth and Sixth, Southwest District Society. Dr. Phil A. Bleakney, Harlingen, President; Dr. C. W. Tennison, San Antonio, Secretary.

Seventh, Austin District Society. Dr. Robert B. Morrison, Austin, President; Dr. M. I. Brown, Austin, Secretary.

Eighth, Ninth and Tenth Districts Medical Society. Dr. J. T. Tadlock, Dayton, President; Dr. George W. Waldron, Medical Arts Building, Houston, Secretary.

Eleventh District Society. Dr. C. E. Willingham, Tyler, President; Dr. F. E. Felder, Palestine, Secretary.

Twelfth, Central Texas, District Society. Dr. C. M. Simpson, Temple, President; Dr. R. J. Hanks, Waco, Secretary.

Thirteenth, Northwestern, District Society. Dr. J. W. Foy, Seymour, President; Dr. Joe R. Wise, 1212 W. Lancaster, Fort Worth, Secretary.

Fourteenth District Society, Dallas. Dr. W. C. Morrow, Greenville, President.

Fifteenth, Northeast Texas, District Society. Dr. Joe D. Nichols, Atlanta, President; Dr. Henry H. Niehuss, Gladewater, Secretary.

ARMY ESTABLISHES SEVEN CENTERS FOR TROPICAL SKIN DISEASE

Establishment of seven centers specializing in the treatment of tropical skin disease has been announced by Major General Norman T. Kirk, Surgeon General of the Army.

The centers, it was explained by Major Clarence S. Livingood, of Philadelphia, Consultant in Dermatology to General Kirk, will be devoted to the care of men returned from overseas, particularly the Pacific areas. The number of beds involved was not made public, as the program envisions an elastic

setup capable of being expanded or contracted as the need arises.

The centers will be at Wakeman General Hospital, Camp Atterbury, Ind.; Brooke General Hospital, Fort Sam Houston, Texas; Moore General Hospital, Swannanoa, N. C.; Harmon General Hospital, Longview, Texas; and in the U. S. Army General Hospitals at Camp Edwards, near Boston, Mass.; Camp Butner, near Durham, N. C.; and Camp Carson, near Colorado Springs, Colo.

"The new arrangement will make possible better distribution of the limited supply of specialists in dermatology," Major Livingood said, "and thus give these soldiers the best possible treatment."

At the same time, Major Livingood said that there is no basis for fear of tropical skin infections spreading in this country, because practically none of these diseases are contagious and no patient with a transmissible skin disease will be allowed out of an Army hospital until he is noninfectious.

Acne was given as an example of a common skin disease which flares up in the tropics. One Army doctor working on the problem used the word "explosive" in describing the cases he had seen in the Pacific.

"The skin diseases are not fully appreciated by the public in the glare of the more dramatic developments of surgery and problems like malaria," Major Livingood said. "But it is true that in tropical areas about 8 per cent of all Army hospital admissions—or one in every 12 or 13—is due to skin conditions."

One of the dermatologist's main efforts, Major Livingood said, is to keep men from "overtreating" skin disease; but the good nutritional state of the American soldier helps protect him from some of the skin diseases common to natives of tropical areas. Major Livingood cited tropical ulcer as an example, saying ulcerations were frequent enough among Americans, but the peculiar tropical ulcer is rare and he thinks that the native gets it because of his poor diet while the American is free of it because he is well fed.—S. G. O. Notes, Aug. 31, 1945.

COLCHICINE FOR LEUKEMIA

Colchicine, a drug derived from the seed of the meadow saffron flower, which grows abundantly in Europe and North Africa, has been found to have a beneficial effect in the treatment of acute myelogenous leukemia, a highly fatal disease.

W. Harding Kneedler, M. D., of Philadelphia, writing in the September 22 issue of *The Journal of the American Medical Association*, says that while no conclusons can be drawn as yet regarding the degree of beneficial effect of colchicine in this type of leukemia, "further trial of the drug for the condition seems justified."

Leukemia is a fatal disease characterized by the presence in the blood of numerous white cells, many of which are immature. The cause is unknown. In the acute type, ulcerative inflammation of the mouth or throat often marks the onset. Hemorrhages are common.

In the case reported by Dr. Kneedler in *The Journal*, colchicine was given in tablet form three times a day. The progress of the disease soon became less rapid, then improved. After losing 58 pounds, the woman patient showed a progressive gain in weight and strength. Transfusions were unnecessary for an eight month period.

After suffering several hemorrhages, the patient finally died.

Commenting on the treatment, Dr. Kneedler said that "colchicine was continued through the course of the disease, certainly without harmful effect and perhaps with actual though temporary benefit." He urged additional investigation.

Dr. Kneedler reported that Dr. O. H. Perry Pepper, also of Philadelphia, tried the drug in 2 cases of acute leukemia. It had no apparent effect in 1 case, but in the other there was complete halting of development for a while. "When relapse occurred the drug was resumed, but the further course of the disease was as would have been expected without the drug." he said.

SURGEON GENERAL ANNOUNCES NEW OFFICER RELEASE POLICY

A revised point system program which will return 13,000 physicians, 25,000 nurses, 3,500 dentists, and an undetermined number of other Medical Department officers to civilian life by January 1, 1946, was announced September 14, 1945, by Major General Norman T. Kirk, the Surgeon General.

Under the plan those Medical and Dental Corps officers who have 80 points, are 48 years of age, or have been in the Army since before Pearl Harbor will be released as surplus officers unless they are specialists in eye, ear, nose, and throat work; plastic surgery, orthopedic surgery, neuropsychiatry, or are laboratory technicians. These specialists will be released if they were called to active duty prior to January 1, 1941.

It is also anticipated that, on the basis of an army of 2,500,000 men, a total of 30,000 doctors, 40,000 nurses, and 10,000 dentists will be released by July, 1946, and if the armies of occupation and troops in the United States are concentrated at large posts, these figures will be exceeded. These figures represent approximately 70 per cent of the peak strengths at V-E Day of these corps.—S. G. O. Notes, Sept. 15, 1945.

CHINESE APPEAL FOR MEDICAL PERSONNEL

The editor of the JOURNAL has been requested by Dr. Szeming Sze, chief, Far Eastern Section, Health Division, United Nations Relief and Rehabilitation Administration, Washington, to publish the following notice regarding the urgent need of medical personnel to care for critical medical conditions existing in China:

The Chinese Government has requested UNRRA to provide, as soon as possible, some two hundred field personnel of the following categories to strengthen the available Chinese personnel. Such personnel will be required to head the respective services in hospitals of 100 or 250 beds, which will be established in areas recently liberated from the Japanese: general surgeons, orthopedic surgeons, genito-urinary surgeons, gynecologists and obstetricians, general physicians, dermatologists and syphilologists, ophthalmologists, otolaryngologists, radiologists, dentists, pediatricians, laboratory technicians, x-ray technicians, sanitary engineers, public health engineers, public health nurses, and clinical nurses. General practitioners with some specialist experience will be acceptable. Candidates should be under 55 years of age and in good physicial condition.

UNIVERSITY OF TEXAS POST-GRADUATE COURSES

The University of Texas, School of Medicine, Galveston, has announced the post-graduate courses outlined below for this fall and early winter. Physicians wishing to register for any of the courses should write Dr. George M. Decherd, Director, Post-Graduate Division, promptly.

SURGERY, OCTOBER 22-26

In this program it is intended to review the recent developments in surgery in which various subjects will be presented by lectures, demonstrations, and

operative and nonoperative clinics. Although clinical and pathalogical aspects will be emphasized, basic anatomical and physiological principles underlying the subjects under consideration will be discussed.

Anesthesiology.—Modern anesthesia, including the practical as well as the scientific application, will be demonstrated by the Department of Anesthesiology. Special instruction will be given to those who are especially interested in anesthesia.

Anatomy.—The faculty of the Department of Anatomy offer the facilities of the Anatomy Laboratory and Museum to those who may wish to use them. Cadaver material can be provided for dissection. Should there be a wish expressed for special dissection and demonstrations on particular regions, these can be arranged. Any such requests should be made in advance to give ample time for their preparation.

Pathology.—The faculty of the Department of Pathology offer the facilities of the Pathology Laboratory and Museum to those interested in review or additional work in gross pathology or surgical pathology. Both mounted and fresh specimens will be available for study along with microscopic preparations showing the lesions. The services of the staff will be available to those desiring them. Special demonstrations of particular disease conditions can be arranged on request; however, any such requests should be made in advance to give time for their preparation.

Guest speakers—Drs. Walter G. Stuck, San Antonio, and George R. Enloe, Fort Worth.

October 22

(8:00-9:00) *Ward Rounds (Urology)*—Drs. R. E. Cone and Charles A. Hooks.
(9:00-12:00) *Operative Clinics (General Surgery)*—Drs. A. O. Singleton and J. M. Thiel.
(2:00-5:00) *Dry Clinics and Lectures (Orthopedic).*
(2:00-4:00) *Recurrent Dislocations of the Shoulder: Anatomical Considerations and Treatment*—Drs. R. F. Blount and G. W. N. Eggers.
Management of Compound Fractures—Dr. G. W. N. Eggers.
Synovial Tumors—Drs. Paul Brindley and G. W. N. Eggers.
Tantalum Arthroplasty of the Mandible—Dr. G. W. N. Eggers.
Bone Grafting in Osteomyelitis—Dr. G. W. N. Eggers.
(4:00-5:00) *Address*—Dr. Walter G. Stuck.

October 23

(8:00-9:00) *Ward Rounds (General Surgery)*—Drs. A. O. Singleton and M. D. Knight.
(9:00-12:00) *Operative Clinics (Orthopedic)*—Dr. G. W. N. Eggers and staff.
(2:00-5:00) *Symposium on Gastro-intestinal Surgery*—Panel: Drs. E. J. Lefeber, J. Q. McGivney, G. S. McReynolds, E. J. Poth, J. M. Thiel, W. S. Wallace.
Esophagus (20 minutes)—*X-Ray*, Dr. Wallace; *Esophagoscopy*, Dr. McReynolds; *Treatment*, Dr. Poth.
Stomach, Duodenum, Small Bowel (40 minutes)—*Opening Discussion of Diagnosis*, Dr. Thiel; *X-Ray Aspects*, Dr. Wallace; *Gastroscopy*, Dr. Lefeber; *Treatment*, Dr. Thiel.
Appendicitis (30 minutes)—*Opening Discussion of Diagnosis*, Dr. Thiel; *Treatment*, Dr. Poth.
Intermission (5 minutes)
Large Bowel (40 minutes)—*Opening Discussion of Diagnosis*, Dr. Poth; *X-Ray Aspects*, Dr. Wallace; *Treatment*, Dr. Poth.
Anal Canal (Minor Ano-rectal Diseases) (30 minutes)—*Discussion and Treatment*, Dr. McGivney.
Questions and Discussion (20 minutes)—Panel.

October 24

(8:00-9:00) *Ward Rounds (Neurosurgery)*—Dr. S. R. Snodgrass and staff.
(9:00-12:00) *Operative Clinics (Urology)*—Drs. R. E. Cone and Charles A. Hooks.
(2:00-5:00) *Dry Clinics and Lectures (Neurosurgery).*
Herniation of the Intervertebral Disc—Anatomy, Physiology, and Pathology of the Intervertebral Disc and Spinal Ligament, Dr. R. F. Blount; *Clinical Picture in Herniated Intervertebral Disc*, Drs. S. R. Snodgrass and G. W. N. Eggers; *X-Ray in the Diagnosis of Herniated Intervertebral Disc*, Dr. Caroline Rowe.
Tantalum Cranioplasty—Dr. S. R. Snodgrass.
Intracranial Tumors—Neurological Diagnosis in Intracranial Tumors, Dr. Stephen Weisz; *Prognosis in Intracranial Tumors*, Dr. S. R. Snodgrass.

October 25

(8:00-9:00) *Ward Rounds (General Surgery)*—Drs. E. J. Poth and J. M. Thiel.
(9:00-12:00) *Operative Clinics (Neurosurgery)*—Dr. S. R. Snodgrass and staff.
(2:00-5:00) *Dry Clinics and Lectures (Urological)*—Drs. R. E. Cone and Charles A. Hooks.
Discussion of Nephritis in Children—Dr. Arild E. Hansen.

October 26

(8:00-9:00) *Ward Rounds (Orthopedic)*—Dr. G. W. N. Eggers and staff.
(9:00-12:00) *Operative Clinics (General Surgery)*—Drs. E. J. Poth and M. D. Knight.
(2:00-5:00) *Address*—Dr. George R. Enloe.
Symposium on Surgical Diseases of the Chest—Drs. Charles T. Stone, George S. McReynolds, Paul Brindley, H. C. Slocum, M. D. Knight, A. O. Singleton.

INTERNAL MEDICINE, NOVEMBER 1-3

Guest speaker—Dr. George Fahr, Professor of Medicine, University of Minnesota School of Medicine.

November 1

(9:00) *Registration*, Out-Clinic Amphitheater, John Sealy Hospital.
(9:30) *Clinics: Peptic Ulcer; Complications; Treatment*—Dr. C. T. Stone.
(10:30) *Cirrhosis of the Liver; Management*—Dr. George R. Herrmann.
(11:00) *Gastritis; Practical Value of Gastroscopy*—Dr. E. J. Lefeber.
(11:30) *Radiologic Diagnosis of Gastric Disease.* Dr. J. B. Johnson.
(12:00) *Gastric Neurosis*—Dr. T. H. Harris.
(12:30) *Intermission for lunch.*
(2:00) *Development and Pharmacology of Antibiotics*—Dr. C. D. Leake.
(2:40) *Bacterial Response to Penicillin*—Mr. C. E. Lankford.
(3:00) *Therapy of Pneumonia*—Dr. C. T. Stone.
(3:30) *Therapy of Meningitis*—Dr. Sako.
(3:50) *Therapy of Syphilis*—Dr. C. N. Frazier.
(4:15) *Therapy of Congenital Syphilis*—Dr. Erle E. Wilkinson.
(4:30) *Therapy of Subacute Bacterial Endocarditis*—Dr. George Fahr.

November 2

(9:00) *Clinic: Cardiac Cases*—Dr. George R. Herrmann.
(10:00) *Physiologic Basis of Congestive Heart Failure*—Dr. George Fahr.

(11:00) *Diagnosis of Rheumatic Fever and Rheumatic Carditis*—Dr. Arild E. Hansen.
(11:30) *Coronary Thrombosis; Management*—Dr. E. H. Schwab.
(12:00) *Aids in Cardiac Diagnosis*—Dr. Arthur Ruskin.
(12:30) *Intermission for lunch.*
(2:00) *Modern Management of Diabetes*—Dr. R. L. Gregory.
(2:45) *Lung Abscess*—Dr. W. F. McKinley.
(3:30) *Bronchoscopic Diagnosis*—Dr. G. S. McReynolds.
(4:15) *Nephritis and Nephrosis*—Dr. George Fahr.

November 3

(9:00) *Clinic*—Dr. R. L. Gregory.
(10:00) *Purpuric Diseases*—Dr. W. L. Marr.
(11:00) *Diagnostic Procedures and Management of Anemias*—Dr. W. C. Levin.
(11:45) *Infectious Mononucleosis*—Dr. W. L. Marr.
(12:15) *Bone Marrow Diagnosis*—Dr. George Fahr.
(1:00) *Adjournment.*

Pediatrics, November 12-17
(dates tentative)

A conference in pediatrics, under the joint auspices of the University of Texas Child Health Program and the Maternal and Child Health Division of the Texas State Board of Health, will have the following guests: Dr. Alton Goldbloom, associate professor of pediatrics, McGill University; Dr. Clifford G. Grules, Rush professor of pediatrics, College of Medicine, University of Illinois, and editor in chief of the *American Journal of Diseases of Children;* Dr. Joseph A. Johnston, pediatrician in chief, Henry Ford Hospital; Dr. Rustin McIntosh, professor and head of the Department of Pediatrics, College of Physicians and Surgeons, Columbia University; and Dr. Irvine McQuarrie, professor and head of the Department of Pediatrics, University of Minnesota School of Medicine.

Obstetrics and Gynecology

A week's refresher course in obstetrics and gynecology is being planned for the early winter.

LIBRARY NOTES

The package library consists of collections of reprints and other periodical material on various subjects, prepared for lending to members of the Association. Requests for packages should be addressed "Library, State Medical Association of Texas, 1404 W. El Paso Street, Fort Worth 3, Texas." Twenty-five cents in stamps should be enclosed with the request to cover postage and part of the expense of collecting the material. Only one package may be borrowed at a time, and packages are allowed to remain in the hands of the borrower for 14 days.

Package Service

Packages were mailed from the Library of the State Medical Association to the following during September:

Lt. Col. Albert M. Schwartz, Waco—(1 book).
Dr. Thomas M. Johnson, Del Rio—*Hospitals, floor plans* (8 articles).
Dr. A. C. Rogers, Vernon—*Erythroblastosis, fetal* (14 articles).
Medical Library, Ashburn General Hospital, McKinney—(5 journals).
Capt. Herbert M. Levenson, Wichita Falls—(1 journal).
Dr. Jarrett E. Williams, Wharton—(1 journal).
Dr. O. F. Harzke, Comfort—(1 journal).
Dr. W. Erhardt, Fairbanks—*Fractures* (3 articles).
Dr. S. Joe McKinsey, McAllen—*Amebiasis* (11 articles).
Dr. Charles Mims, Mission—(2 journals).
Medical Library, AAF Regional Hospital, San Antonio—(9 journals).
Dr. Jim Camp, Pecos—(1 journal).
Dr. J. T. Frawley, Pasadena—*Anaphylaxis and Allergy* (26 articles).
Dr. A. S. Epperson, Houston—*Brain, hemorrhage* (13 articles).
Mr. A. C. Van Hay, Eastland—*Sex, education* (6 articles).
Dr. Ralph H. Homan, El Paso—*Neuroses and Psychoneuroses, cardiac neuroses* (12 articles).
Dr. A. E. von Tobel, Marlin—*Blood Sedimentation* (20 articles).
Dr. Thomas E. Cook, Dallas—*Thyroid, surgery* (26 articles).
Dr. A. P. Utterback, Brackettville—*Arteriosclerosis, cerebral* (9 articles).
Dr. Evelyn G. Powers, Amarillo—*Neurosyphilis* (9 articles).
Dr. Herbert Merz, Alvin—*Medicine, socialized* (34 articles).
Dr. M. E. Jacobson, Amarillo—*Undulant Fever, therapy* (21 articles).
Dr. F. T. McIntire, San Angelo—*Arsenic, toxicity* (8 articles).
Major S. H. Nickerson, Camp Maxey—(2 journals).
Mrs. C. H. Schwedes, Weslaco—*Drugs* (8 articles).
Lt. James L. Johnson, Muskogee, Okla.—*Poliomyelitis* (10 articles).

Accessions

Springfield, Illinois, C. C. Thomas, Publisher—Bradford and Spurling: The Intervertebral Disc, ed. 2.

Baltimore, Williams & Wilkins—Taub: Essentials of Clinical Allergy.

United States Public Health Service: Manual for Coding Causes of Illness According to a Diagnosis for Tabulating Morbidity Statistics.

Summary

Reprints received, 552.	Local users, 28.
Journals received, 196.	Borrowers by mail, 25.
Items consulted, 96.	Packages mailed, 29.
Items taken out, 53.	Items mailed, 261.

Total items consulted and loaned, 410.

MOTION PICTURE LENDING LIBRARY

Motion picture films on medical subjects, 16 mm., both silent and sound, some in color, and suitable for either medical or lay audiences, are available for loan to county medical societies, hospital staffs, or individual physicians, on request. Borrowers will be required to pay only the cost of shipment of the films, by express, with insurance, and for any damage to films while in the hands of the borrower.

Requests for films should be addressed to "Motion Picture Lending Library, State Medical Association of Texas, 1404 West El Paso Street, Fort Worth 3, Texas." A list of available films, with descriptions, will be furnished on request.

The following motion picture films were loaned by the Motion Picture Lending Library of the State Medical Association during September:

Goodbye, Mr. Germ (Available through the courtesy of Texas Tuberculosis Association)—Fort Worth City Health Department, school and city health nurses.

Modern Nutrition (Available through the courtesy of E. R. Squibb & Sons)—Fort Worth City Health Department, school and city health nurses.

Sutures Since Lister (Available through the courtesy of Johnson & Johnson)—Fort Worth City Health Department, school and city health nurses.

HOSPITALS NEEDING INTERNS AND RESIDENTS

El Paso City County Hospital, El Paso. Capacity 192 beds. George W. Cook, Col., U. S. A. Ret., Superintendent (3 interns Oct. 1, 1945).

Methodist Hospital, Dallas. Capacity 206 beds. C. W. Sensenbach, M. D., Medical Director; (4 interns now).

Nix Hospital, San Antonio. Capacity 145; admissions 5,564. Ellen Louise Brient, R. N., Superintendent (1 intern).

St. Paul Hospital, Dallas. Capacity 270 beds. C. W. Sensenbach, M. D., Medical Director (1 intern now).

Wichita General Hospital, Wichita Falls, capacity, 135; admissions 4,303. Mrs. Margaret Hales Rose, Superintendent (2 residents needed at once. Salary $175.00 and maintenance).

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933.

OF TEXAS STATE JOURNAL OF MEDICINE, published monthly at Fort Worth, Texas, for September, 1945.

STATE OF TEXAS } ss.
COUNTY OF TARRANT }

Before me, a Notary Public in and for the State and County aforesaid, personally appeared Dr. Holman Taylor, who, having been duly sworn according to law, deposes and says that he is the Editor of the Texas State Journal of Medicine, and the following is to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, State Medical Association of Texas, Fort Worth, Texas; Editor, Dr. Holman Taylor, Fort Worth, Texas; Managing Editor, Dr. Holman Taylor, Fort Worth, Texas; Business Manager, Dr. Holman Taylor, Fort Worth, Texas.

2. That the owner is The State Medical Association of Texas, a non-profit corporation, with no capital stock, an organization of individual doctors with a voluntary membership of about 4,645 members at this time. Executive officers of the Association are: President, Dr. H. F. Connally, Waco, Texas; Vice-Presidents, Dr. R. G. Johnson, Newgulf; Dr. E. W. Wright, Bowie; Dr. H. E. Whigham, McAllen; Secretary, Dr. Holman Taylor, Fort Worth; Treasurer, Dr. K. H. Beall, Fort Worth.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent of total amount of bonds, mortgages, or other securities are: None.

HOLMAN TAYLOR, M. D.,
Editor and Business Manager.

Sworn to and subscribed before me this 21st day of September, 1945.

(Seal) BONNIE L. COLLINS.

(My commission expires June 1, 1947.)

NEWS

Lubbock Crippled Children's Clinic.—A crippled children's clinic was held in Lubbock on September 5, the Levelland *Herald* reports. Dr. Charles Clayton, Fort Worth, and Dr. Walter G. Stuck, San Antonio, orthopedists, examined 107 children. A nutritionist exhibited films on diet and health and conferred with families on diet problems.

Sarah Cartmell Memorial Hospital.—Substantial contributions are being received for the Sarah Cartmell Memorial Hospital, Palestine, Texas, according to the Palestine *Herald-Press*. Plans for the hospital, underwritten early in August by Miss Cartmell when she donated $65,000 in cash for a modern, nonprofit institution to bear her name, are under the supervision of a five-member board of trustees, which at present is not actively soliciting contributions. An invitation for interested persons to donate to the hospital fund, however, has resulted in a number of cash contributions by townspeople, including contributions of $1,000 each by Drs. Leroy Trice, Rush Q. Hunter, and Fred Felder.

A Bequest to the El Paso County Medical Society of the home of the late Dr. S. T. Turner, to be used as a club, meeting place, or library, has been announced through the El Paso *Times*. Dr. Turner, a retired El Paso physician who died August 10, left his home in the custody of his wife, to be used by her during her lifetime or until such time as she wishes to turn it over to the medical society. Dr. Turner was a charter member of the society.

Long-Sneed Clinic Building.—Continued operation as a clinic building of the Long-Sneed Hospital of Denison has been assured by Mercer Simms, according to the Denison *Herald*. Mr. Simms, who purchased the hospital several months ago from Dr. A. G. Sneed and Mrs. T. J. Long, had earlier contemplated converting the building to office or apartment use, but he now plans to remodel the building for use by five or six doctors. The clinic building facilities will be available to all physicians and surgeons. The Long-Sneed Hospital was established about fifteen years ago by the late Dr. T. J. Long and Dr. Sneed. Following the death of Dr. Long, Dr. Sneed had continued operation of the hospital until early this year.

Typhus Control.—Two hundred physicians and city officials from several counties met in Hallettsville on August 8 to hear reports of progress made on the national typhus research program by the Research Unit stationed in Hallettsville, a report in the Cuero *Record* reveals. H. F. Shafer, coordinator of the Research Unit at Hallettsville, presided over a program in which Dr. George W. Cox, state health officer; Grover Marshall, senior district assistant of the U. S. Fish and Wildlife Service; Dr. Storrs, member of the National Research Council and head of the Zoology Department of the University of California; Dr. E. R. Rickard, Rockefeller Foundation; V. M. Ehlers, chief engineer of the State Health Department; and Mr. Landon, Department of the Interior, participated. Excellent results obtained in killing fleas with DDT and new methods of exterminating rats, particularly by the use of a new formula known as 1080, were explained. Paul W. Schulze, Hallettsville sanitarian, said that a U. S. Public Health Service official recently put out five baits with 1080 in a Hallettsville cafe and guaranteed that thirty minutes after the lights were turned out in the cafe there would be five dead rats. When the lights were turned on at the end of the thirty minute period, seven rats lay dead. Left overnight, the 1080 accounted for sixty-five dead rats. It was reported at the conference that thirty-six of the one hundred counties over the nation singled out as having the highest incidence of typhus were located in Texas, and that control programs were being centered in these areas. An additional $700,000 for the typhus control program was recently appropriated by the Federal government because of results obtained in the research work sponsored by the Department of the Interior, Department of Agriculture, U. S. Public Health Service, Rockefeller Foundation, and other agencies, of which the Hallettsville project is a unit.

A typhus vaccination program was begun in Cuero on August 14 under sponsorship of the city, the Cuero *Record* reports. Vaccine was furnished free by the State Department of Health, and Cuero physicians are furnishing their services without charge. Dr. J. C. Dobbs and Dr. A. J. Bohman performed the vaccinations, aided by several young women appointed at the request of the mayor. All townspeople over 10 years of age have been urged to take advantage of the vaccinations against typhus fever in an effort to stamp out spread of the disease—the third such program in the county. A series of three injections at one-week intervals was ar-

ranged for by setting aside two days each of three successive weeks especially for the vaccinations. Dr. Dobbs reports that 1,030 have been vaccinated in this latest drive.

The Tyler-Smith County Health Department and the State Health Department's recommendation for a typhus control program in Tyler, embodied in an ordinance passed on first reading by the city commission, has been endorsed by the Smith County Medical Society, according to the Tyler *Telegraph* of August 17. The proposed program would include rat proofing of present buildings, putting rat proof features in all new constructions, elimination of rat harbors, killing of rats, and destruction of fleas with DDT. The Medical Society urged that typhus fever be stamped out as has been accomplished with other communicable diseases and favored the suggested program as one which would not put a financial strain on any one and which would liquidate itself. The Tyler-Smith County Health Department estimated that there are 80,000 rats in the city and that their destructive activities cost $1,600,000 a year in addition to their menace as spreaders of typhus fever.

Baylor University College of Medicine.—The trustees of the recently incorporated Baylor University College of Medicine Alumni-Faculty Foundation have established a lectureship in memory of those alumni who made the supreme sacrifice during World War II. Outstanding physicians will be brought to the college in a series of lectures which will average four a year.

The foundation is a non-profit organization and, according to its charter, was formed "to promote and further medical education in the State of Texas by establishing an endowment and foundation in the interest of the welfare of the College of Medicine of Baylor University and for aiding and extending the work and medical activities of the said College of Medicine."

A committee to investigate needs of the college for the foundation has been appointed, with Dr. Walter H. Moursand, dean of the college, as chairman.

Officers and trustees of the foundation are president, Dr. E. Freeman Robbins; vice presidents, Drs. Herman W. Johnson and Henry A. Petersen; secretary-treasurer, Dr. Thomas P. Kennerly; trustees, Dr. Frank J. Ernst, Lloyd Gregory, Dr. John C. Haley, Earl C. Hankamer, Dr. J. Wade Harris, T. Everton Kennerly, Dr. Walter H. Moursund, Sr., Dr. Robert T. Patterson, Dr. Norbonne B. Powell, W. Emmett Sampson, Andrew C. SoRelle, and John H. Teer.

Southwestern Medical College graduates were addressed by Rear Admiral Lucius Warren Johnson at their recent commencement exercises, informs the Dallas *News*. The exercises were held September 3, at McFarlin Memorial Auditorium, Dallas, with forty-eight candidates receiving medical degrees. The board of trustees of Southwestern Medical Foundation honored Admiral Johnson with a luncheon at the Baker Hotel September 3.

Admiral Johnson is a wearer of the Navy Cross and various campaign medals. As officer in charge of hospital construction in the Bureau of Medicine and Surgery, Washington, in 1939, he had much to do with the planning and development of the National Naval Medical Center, Bethesda, Md. Since March, 1945, he has been Eleventh Naval District Medical Officer, San Diego Naval Operations Base.

Texas Hospital Survey Advisory Council.—Gov. Coke Stevenson recently designated the State Board of Health as the agency to assist the U. S. Public Health Service in a survey of Texas hospital facilities, advises the Dallas *News*. Governor Stevenson also appointed a seventeen-member advisory council, which will make recommendations to the State Board of Health. Governor Stevenson in making the appointments stated that he understood the ultimate aim of the program is to decide where Federal aid is needed in providing hospitals. The Forty-ninth Legislature, by resolution, authorized the governor to appoint a fifteen-member commission to work with the Federal officials in a survey of Texas hospital facilities, but Attorney General Grover Sellers ruled that the power to spend money could not be delegated by resolution.

Governor Stevenson stated that the Board of Health had been designated by him as the state agency to help carry out the survey authorized by an act of Congress. Members of the State Board of Health are Dr. A. W. Rogers, Corsicana; Dr. W. P. Harrison, Teague; Dr. John A. Hart, Beaumont; Dr. Howard Granberry, Austin; Dr. O. B. Kiel, Wichita Falls; J. P. Burden, San Antonio; and Dr. S. D. Coleman, Navasota.

Advisory council appointments by Governor Stevenson consist of Lawrence R. Payne, Baylor Hospital, Dallas; Mrs. Josie M. Roberts, Methodist Hospital, Houston; E. M. Collier, Hendrick Memorial Hospital, Abilene; Sister Mary Evangeline, Hotel Dieu Hospital, Beaumont; Dr. Truman Terrell, Fort Worth; Mrs. Alfreda P. Hassell, Medical and Surgical Memorial Hospital, San Antonio, and Philip R. Overton, Austin.

University of Texas News.—James W. Rockwell, Houston, has made a donation to aid the endowment of the Marvin Lee Graves Fellowship in Internal Medicine. This fellowship established by Dr. Graves' children, is designed to assist a young physician of promise in special research and study in internal medicine. It is named for Dr. Marvin Lee Graves of Houston, professor emeritus of medicine, University of Texas School of Medicine.

Sharp & Dohme, Inc., Glenolden, Pa., has made a grant to the Department of Pediatrics of the University of Texas School of Medicine for study of sulfa drugs in the control of intestinal infections. The grant is to be administered by Dr. Arild E. Hansen, professor of pediatrics and director of the Child Health Program, with the cooperation of Dr. Edgar J. Poth, professor of surgery and director of the Laboratory of Experimental Surgery, and Dr. MacDonald Fulton, visiting professor of pediatric research.

Dr. Charles M. Pomerat, professor of anatomy, has been made a corresponding member of the Mexican Academy of Science. Dr. Pomerat recently spent several weeks in Mexico City studying tropical diseases and assisting in the establishment of laboratories for tissue culture experimentation.

Dr. Willard R. Cooke, professor of obstetrics and gynecology, has been made an honorary member of the Italo-American Centre.

Ninety-nine members of the freshman class accepted for matriculation at the opening of the fall term, September 13, include twenty-seven members assigned to the Navy V-12 Training Program, twenty-seven to the Army Specialized Training Program, and forty-five civilians, it was announced by Dr. D. Bailey Calvin, dean of students of the Medical College, reports the Galveston *News*.

I. H. Kempner, chairman of the special committee of the Galveston Chamber of Commerce on the Medical College, recently asserted that Galveston must act soon with respect to providing housing near the University of Texas School of Medicine, condemning dilapidated buildings, and improving health and sanitary facilities, if it is to retain the Medical School at Galveston, according to the Galveston *News*. Mr. Kempner pointed out that it is a job both for private and municipal investment. Projects may be divided into those which the Sealy-Smith Foundation is prepared to install, and those which must be furnished by Galveston as a municipality

and through private investments of its citizens. The various improvement projects specifically recommended were as follows:

1. Homes and adequate apartments for the faculty. It was stated that dissatisfaction justifiably obtains among some members of the present faculty because of the admitted inadequacy of local housing facilities, which is reasonable ground for some of them being in favor of removal of the Medical School.

2. A first class, modern apartment hotel, not necessarily large, for relatives and friends of persons from out of the city seeking treatment at the hospitals.

3. Condemnation of buildings that are hazards to health, if not in some cases to life. Reference was made to charges before the last legislature and the state at large that Galveston is a decadent city, and such accusation was increased by the ability to point to the slum character of dwellings that the sick and visitors encounter as they drive from the Union Depot or other central locations to John Sealy Hospital.

4. Improvement of health and sanitary facilities, a sewer treatment and disposal plant. It was pointed out that this need had been asserted by official State Health authorities, and the mayor of Galveston in the newspapers had shown the way it might be financed and maintained.

5. Filling the east end flats to prevent a health menace and provide for expansion of the Medical School by the state and the hospital by the Sealy-Smith Foundation.

6. Construction of a tuberculosis hospital.

7. Providing dormitories and other living units for the student body. Mr. Kempner asserted that this is a proper function of the state, but that Galveston cannot consistently urge that duty on the state unless its citizens are actively and substantially responsive to their own obligations toward the proper support of other desirable community needs.

It was pointed out that Galveston needs to subscribe to a first mortgage issue (that might approximate, but not exceed $1,000,000), bearing interest, to build the hotel, the apartments, and the houses as indicated. It was further asserted that there is no reason to anticipate loss of principal or failure of these projects to earn 4 per cent interest and depreciation, but if Galvestonians are unwilling to show their faith in their city or Medical School and wait for their neighbors, the Sealy-Smith Foundation, or the state to come to their rescue, then they would demonstrate a lack of that faith which characterized the Galveston spirit of forty years ago when over $1,500,000 was raised to build the seawall following the serious storm in which many inhabitants lost their lives. Mr. Kempner asserted that it is as necessary today as then to raise funds to effect community progress, if not salvation.

A Texas Child Health Council was organized August 12 at an all day conference in the Galvez Hotel of Texas pediatricians and others interested in child health, reports the Galveston *Tribune*. Members of the council include Dr. Arild E. Hansen, director of the Child Health Program of the University of Texas; Dr. Chauncey D. Leake, vice president and dean of the University of Texas School of Medicine; Dr. Frank Lancaster, Houston, president of the Texas Pediatric Society; Dr. John Ashby, Dallas, representing the American Academy of Pediatricians; Dr. H. Leslie Moore, professor of pediatrics, Southwestern Medical College, Dallas; Dr. J. H. Park, Jr., professor of pediatrics, Baylor Medical School, Houston; Dr. Holman Taylor, Fort Worth, secretary of the Texas State Medical Association; Dr. T. J. McElhenney, Austin, chairman of the Texas section, American Society of Pediatricians; Dr. Fred Helm, Austin, pediatrics consultant of the Division of Maternal and Child Health of the Texas State Board of Health; Dr. Fred Elliott, dean of the University of Texas Dental School, Houston; Dr. George Decherd, director of postgraduate education of the University of Texas School of Medicine; Dr. Boyd Reading, professor of pediatrics, University of Texas School of Medicine; Dr. Francis Garbade, assistant professor of pediatrics, University of Texas School of Medicine; Dr. C. O. Terrell, Fort Worth, regent of the University of Texas; and Dr. Robert L. Sutherland, Austin, director of the Hogg Foundation for mental hygiene. Dr. Terrell and Dr. Sutherland were unable to attend the meeting.

The functions of the Texas Child Health Council were outlined as follows:

1. To correlate, encourage, and initiate activities concerning medical and dental aspects of child health problems in Texas, receiving the essential and necessary leadership of physicians and dentists.

2. To integrate and foster pediatric meetings and conferences.

3. To stimulate investigation activities in clinical problems and fundamental research.

4. To coöperate aggressively in a program pertaining to child health as carried on by professional, semiprofessional, and lay groups under the leadership of physicians and dentists.

5. To point out the present unsatisfactory status of hospitals for children in Texas and to institute means to improve them.

6. To coöperate with the State Board of Health in the reduction of child mortality in Texas and in reducing the high incidence of preventable children's diseases.

7. To assist in promoting most effective training programs for Texas pediatricians, general physicians, and all others concerned with child health.

The discussion at the conference brought out the fact that child mortality rates are generally higher in Texas than in other states and that there is a higher incidence of preventable children's diseases. The lack of sufficient hospital beds for children was also stressed.

Need for improvement in pediatric nursing education was discussed.

The council announced that it would welcome the opportunity for coöperation with all groups interested in promoting child health. While representation on the council will be limited to professional organizations, a special advisory committee will be organized for coöperation with various lay groups interested in child health.

Further additions to the council membership will be made from time to time, it was announced.

Norsworthy Bequest to Houston Hospital.—Income from Houston real estate valued at more than $200,000, left to Hermann Hospital, Houston, by the late Dr. O. L. Norsworthy, will be used in pathological research, Nat U. Collier, general manager of the Hermann Hospital estate, announced September 12 upon receipt of title to the property, according to the Houston *Chronicle*. Dr. Norsworthy, first chief of staff of the Hermann Hospital, died January 5, 1935, leaving a large portion of his estate to the hospital. The principal of the gift is to be conserved, Mr. Collier said, and the gift will retain its identity as a separate endowment in control of the trustees.

A Short Course of Instruction on Murine Typhus Control was held in Austin August 13-18, under the direction of the Texas State Department of Health, assisted by the University of Texas and the U. S. Fish and Wildlife Service, with the Texas Water and Sanitation Research Foundation as co-sponsor. The course, which was attended by seventy-three sanitarians from throughout the state, was conducted in the offices and laboratories of the State Health Department building and the University of Texas.

Instruction was offered principally to acquaint sanitarians with the uses of DDT and the new poison 1080. While there were several lectures on rat borne diseases, the main features of the course were the demontrations and field work on the application of DDT when used as a dust and as a residual spray, methods of mixing, equipment used, method of applying the various poisons, and latest methods in trapping and the technics used in combing and identifying ectoparasites. On completion of the course, those who attended were given DDT poison dusts and equipment so that they could start operations on cooperative projects in their localities.

The State Department of Health plans to keep an instructor at all times to teach sanitarians sent to Austin in the use of the new materials and equipment now available, Dr. George W. Cox, state health officer, reports.

The Randolph Field Army Air Forces School of Aviation Medicine graduated 145 medical officers September 18, among whom were nine Texas physicians. Lt. Col. F. L. Duff, assistant commandant of the school, addressed the first peacetime graduating class of flight surgeons and flight nurses held since V-J Day, and presented awards to 145 flight surgeons and 20 flight nurses. Texas physicians completing the course were Capt. Raphael Conte, Houston; Capt. R. C. Douglas, Lubbock; Capt. James W. Carter, Jr., El Paso; Capt. Clell G. Holland, Houston; Capt. R. R. Nixon, San Antonio; Capt. Charles A. Mangham, San Antonio; Capt. Lewis E. Morgan, Bonham; Capt. Charley E. Wysong, McKinney, and Capt. Groom S. Shepard, Pioneer.

The Lederle Laboratories, Inc., Radio Program, "The Doctors Talk It Over," heard weekly coast to coast over the American Broadcasting Company network, on Tuesday nights, will be continued for another year, it was recently announced. The purpose of the program, which was a pioneer effort of its kind, is ethically to present information to members of the medical and allied professions and the public at large on important medical subjects of the day. Many thousands of reprints of the broadcasts have been requested by professional listeners, and the program itself is translated into Spanish for rebroadcast in Latin-America.

Public Health Schools to Be Accredited.—The American Public Health Association announces the inauguration of a program of accrediting schools of public health throughout the United States. The project will be developed by funds made available by the Commonwealth Fund. Prof. C. E. A. Winslow, of New Haven, Conn., will be counsellor in charge of the investigative work, and he will be assisted by persons experienced in administration of health departments, chosen from various localities. Accreditation will be based on a visit to an institution by a representative of the committee on professional education of the American Public Health Association, and on other data. Decisions of the committee will be finally subject to approval by the executive board of the Association. Institutions will be accredited which are properly qualified with regard to program, personnel, and facilities to offer adequate courses leading to the degrees of master of public health, doctor of public health, and diploma in public health.

The School of Medical Technology, State Department of Health of Kentucky, announces a year's course in hematology, medical chemistry, serology, bacteriology, parasitology, tropical diseases, and urinalysis. Classes begin in September, February, and June. Entrance requirements are two years of college, including courses in chemistry and biology. Scholarships are available. Further information may be secured by addressing L. H. South, M. D., 620 South Third Street, Louisville 2, Ky.

Military Personals

Capt. Charles H. Gillespie, M. C., A. U. S., formerly associated with Scott and White Hospital, Temple, has returned from an overseas assignment and is now on surgical duty at McCloskey Hospital, informs the Taylor *Press.* Captain Gillespie entered service April 10, 1942. He has served in England and in forward evacuation hospitals in Europe. He is a native of Bartlett and a graduate of the University of Texas Medical School.

Major Tom Bunkley, M. C., A. U. S., recently returned to his former home, at Stamford, after four and one-half years of service in the Army. Major Bunkley returned last April from the Pacific area, where he had had twenty-seven months' service. Most of his overseas service was in New Guinea, but the latter part was with MacArthur's forces in the Philippines. In New Guinea he served as flight surgeon for a fighter squadron, reports the Stamford *American.*

Capt. Robert F. Short, Jr., M. C., U. S. N. R., formerly of Dallas, was recently promoted from the rank of commander, advises the Dallas *Times-Herald.* Captain Short is now on Okinawa. He entered service as a lieutenant commander in the Navy, in December, 1941. He served eighteen months in Trinidad, British West Indies, and was stationed at the Naval hospitals in Miami, Fla., and San Diego, Calif., before going to the Pacific in June. Captain Short had practiced medicine in Dallas fifteen years prior to entering service.

Capt. Guy L. Pattillo, M. C., A. U. S., is spending a thirty day leave with his family at Abilene, after returning to the States from sixteen months overseas in the European theater. Captain Pattillo entered service three and one-half years ago and has been a flight surgeon with the 493rd Bomb group of the Eighth Air Force in England. He has also seen service in France, Scotland, and Germany, where he evacuated casualties. When his leave is finished he will report in Sioux City, Iowa, informs the Abilene *Reporter-News.*

Major Vaughn Blake, M. C., A. U. S., is spending a thirty day leave with his father, Dr. J. V. Blake, Sr., who has been quite ill at his home in Floresville, according to the Floresville *Chronicle-Journal.*

Lt. Comdr. Walter B. Petta, M. C., U. S. N. R., of Fort Worth, was recently promoted from the rank of lieutenant, advises the Fort Worth *Press.* Commander Petta is flight surgeon on the aircraft carrier U. S. S. Essex in the Pacific theater. He entered the Navy in March, 1942, after completing twenty months' internship at the City-County Hospital, Fort Worth. He served twenty-two months in the Pacific on his first tour of duty and has been overseas a second time since March.

Lt. Comdr. E. F. Baker, M. C., U. S. N. R., of Ennis, was recently promoted from the rank of lieutenant, states the Ennis *News.* Commander Baker has been in service about three years. He has been stationed in Corpus Christi; Tulsa, Okla.; Pensacola, Fla.; and in California before being transferred to Oregon. He was recently at home on leave.

Major Ray V. Brasher, M. C., A. U. S., of Fort Worth, now ward officer of the 36th Evacuation Hospital in the Philippines, was recently awarded the Bronze Star and promoted from the rank of captain, according to the Fort Worth *Star-Telegram.* The decoration was given Major Brasher for meritorious service on Leyte and Luzon from October 26, 1944, to April 21, 1945. The citation pointed out that Major Brasher had displayed high professional skill and an intelligent and sympathetic manner in caring for the wounded. He has been in the Pacific eighteen months.

Col. Sim Hulsey, M. C., A. U. S., Fort Worth, is commanding officer of the 36th Evacuation Hospital in the Philippines, where Major Brasher is now stationed.

Capt. Earl E. Cockerell, M. C., A. U. S., Abilene, was recently placed in charge of the department of tropical diseases at Brooke General Hospital, informs the Abilene *Reporter-News*.

Capt. Arthur J. Richardson, Jr., M. C., A. U. S., Jasper, was recently awarded the Silver Star by the commanding general of the 24th Infantry and was cited for gallantry in action in the Philippine Islands in rendering medical service to the wounded in the combat area, under enemy fire. He is credited with cool efficiency and heroic leadership which helped to prevent greater suffering and loss of life. His actions are reported to have been an inspiration to those about him and worthy of the best traditions of the medical service. Captain Richardson has been overseas since November 22, 1943, and received the Bronze Star for his part in the Leyte campaign. Captain Richardson is the son of Dr. and Mrs. Arthur J. Richardson, of Jasper.

Major Spencer A. Collom, M. C., A. U. S., Texarkana, was recently awarded the Bronze Star medal for meritorious achievement in connection with military operations, states the Texarkana *Gazette*. Major Collom is chief of the orthopedic section of the 300th General Hospital, a unit of the Peninsular Base Section, chief Army Service Force in the Mediterranean theater of operations. A citation which accompanied the medal awarded to Major Collom said in part: "His prompt and efficient definitive treatment resulted in the return to duty of many patients that would ordinarily have to be evacuated to the zone of interior." Major Collom was commissioned in 1942, and went overseas in 1943. He saw service in North Africa and Italy. Major Collom's wife and mother, Mrs. S. A. Collom, Sr., are expecting him home by Christmas.

The office of the Surgeon General, United States Army, announces the following promotions of medical officers in the Army, from Texas:

From lieutenant colonel to colonel: *Furman Hillman Tyner*, M. C., Port Arthur.

From major to lieutenant colonel: *Ivan Henry Readinger*, M. C., El Paso; *Benjamin Borroum Shaver*, M. C., San Antonio; *George Wilbur Beeler*, M. C., Texas City; *James Walter Long*, M. C., Port Arthur; *Cornelius Olcott, Jr.*, M. C., Harlingen.

Lt. Comdr. E. M. Cyrus, Jr., M. C., U. S. N. R., of Fort Worth, has recently been promoted from the rank of lieutenant. Commander Cyrus is stationed at the Naval Hospital in New Orleans.

Comdr. Gatlin Mitchell, M. C., U. S. N. R., of Fort Worth, has recently been promoted from the rank of lieutenant commander. He is chief of the eye, ear, nose, and throat division of the U. S. Navy Hospital at San Diego, Calif.

Personals

Dr. Hugh Hampton Young, of Baltimore, Md., died August 23, 1945. Dr. Young, a native of San Antonio, Texas, became internationally distinguished as a urologist. He had been affiliated with Johns Hopkins University for more than fifty years. He was a director of the university's Brady Clinic until his retirement in 1942. In addition to his attainments in medicine, Dr. Young was a patron of art and music, and served as vice president of the Baltimore Museum of Art and as president of the Baltimore Opera Club. He had frequently visited in his native state, Texas, and on more than one occasion had been an honor guest at the State Medical Association annual sessions.

Col. Charles Franklin Craig, M. C., U. S. A., Ret., of San Antonio, was recently awarded an honorary degree of doctor of science by Tulane University School of Medicine, New Orleans, in recognition of his scientific achievements. Dr. Craig is internationally recognized as a distinguished pathologist, bacteriologist, and authority on tropical medicine. He is professor emeritus of tropical medicine at Tulane. —*San Antonio News*.

Dr. E. B. Richey, former director of the Brownwood-Brown County Health Unit, has been transferred to the State Health Department, Austin, informs the Brownwood *Banner*. *Dr. E. W. Prothro*, formerly acting director of the Brownwood-Brown County Health Unit, now serving as acting director of the San Angelo-Tom Green County Health Unit, will again assume the position of acting director in the place of Dr. Richey, dividing his time between the units at Brownwood and San Angelo.

Dr. W. Ray Hanna, Sulphur Springs, was recently appointed health officer of Hopkins County, filling a vacancy created by the death of Dr. Frank Long, reports the Sulphur Springs *Telegram*.

Dr. F. N. Brown, Houston, suffered a burned right hand and a broken nose when struck by 220 volts and knocked to the floor while working with an x-ray machine, advises the Houston *Press*. *Dr. T. E. Ward*, who was working with Dr. Brown, pulled him away from the wires and cut the switch. It is reported that his injuries are not serious.

Dr. Harriet Rogers, Commerce, is taking postgraduate work in pediatrics in New York, states the Commerce *Journal*.

Dr. Walter C. Brown recently announced his intention to resign as assistant superintendent of the State Tuberculosis Sanatorium, the San Angelo *Standard-Times* reports. Dr. Brown is planning to open offices in Corpus Christi and to specialize in diseases of the chest.

Dr. Herman Weissman, Legion, Texas, will be awarded a fellowship certificate at the next convocation of the American College of Chest Physicians, which will be held in conjunction with the annual meeting of that organization in 1946, as a result of having passed successfully the written examination in 1945. *Dr. Thomas R. Jones*, Houston, and *Major Lloyd R. Ayers*, San Antonio, will also be awarded their fellowship certificates at the 1946 meeting.

Marriages

Dr. Elbert R. Leggett, Fort Worth, was married September 15 to Miss Frances Murray, Austin. Dr. Leggett received his doctor of medicine degree from the Southwestern Medical College, Dallas, on September 3, and has been commissioned as a first lieutenant in the Army medical corps reserve. Mrs. Leggett is the daughter of Dr. and Mrs. R. V. Murray, Austin. The couple will make their home in Denver, Colo., while Dr. Leggett serves his internship at Denver General Hospital.

Dr. Francine Jensen, Houston, and Mendel B. Word, Jr., Port Arthur, were married August 18, in Houston, where they will reside. Mrs. Word is a graduate of the University of Texas School of Medicine.

Dr. Stafford L. Norman, Coleman, was married to Miss Mattie Ellen Hood, Jacksonville, on May 15.

Dr. David Mendel, Houston, was married to Miss Miriam Wydra, of Washington, D. C., on June 27.

SOCIETY NEWS

Bexar County Society

July 19, 1945

(Reported by A. O. Severance, Secretary)

Symposium on Typhus Fever:

Destruction of Rat Fleas to Prevent Typhus Fever—Capt. David E. Davis.

Rat Proofing and Rat Poisoning in the Prevention of Typhus Fever—Milton Dayton, Chief of the Typhus Division, State Health Department.

A Review of the Literature on European and Murine Types of Typhus Fever—E. R. Rickard, Field Staff Member, International Health Division, Rockefeller Foundation.

The Use of Para-Aminobenzoic Acid in the Treatment of Typhus Fever—Major P. K. Smith, Chief of the Department of Pharmacology, School of Aviation Medicine, Randolph Field.

Laboratory Studies in Typhus—Major Pollard, Eighth Service Command Laboratory, Fort Sam Houston.

The Typhus Fever Problem and the Importance of Reporting Cases—Col. Charles F. Craig, San Antonio.

Typhus Fever in Mexico—J. A. Watts, San Antonio.

The Typhus Problem from the Viewpoint of the Public Health Officer—S. W. Bohls, Laboratory, State Health Department, Austin.

Bexar County Medical Society met July 19 in the Medical Library Building, San Antonio, with H. M. Bush, president, presiding.

Conn Milburn, chairman of the scientific program, presented the scientific program as given above.

David E. Davis described methods used in destroying rat fleas with the insecticide DDT. It has been estimated that this chemical has reduced the index of fleas from 13 to .6 fleas per rat. The powder had been placed in the rat runs in twelve stores in San Antonio. The program of rat eradication and destruction of rat fleas was begun in April, 1944, and results are promising. An effort is being made to determine whether getting rid of the rat fleas in the city will reduce the incidence of typhus fever.

Milton Dayton, chief of the Typhus Division, State Health Department, described the rat proofing and rat poisoning program which was begun in April, 1944.

E. R. Rickard, of the Rockefeller Foundation, sent to San Antonio to investigate the problem of typhus fever, presented a brief review of the literature on the European type, which is louse-borne and which is attended by a high mortality. Dr. Rickard then described the Murine type, which is spread by rat fleas, lice, and ticks. It is a rickettsial disease, occurring principally in the summer, and is of occupational type. The rickettsia attack the brain and endothelial cells. The clinical picture, treatment, prophylaxis, and importance of reporting cases were discussed by Dr. Rickard.

Col. John O. Woodland, commanding officer of Brooke General Hospital, discussed Dr. Rickard's paper. Colonel Woodland emphasized particularly features of subclinical cases in which the diagnosis is not made, and also pointed out that as a result of incomplete investigations typhus fever is sometimes erroneously reported.

Major P. K. Smith discussed the use of para-aminobenzoic acid in the treatment of typhus, which was first employed in Cairo, Egypt. He discussed the pharmacology of the drug and reported three cases in which it had been used, which responded favorably.

Major Pollard pointed out the value and usefulness of laboratory tests in the study and diagnosis of typhus fever. The following three tests were referred to: (1) animal inoculation (guinea pigs), (2) the Felix-Weil agglutination test with rising titer, and (3) the complement-fixation test, also with rising titer. It was pointed out that the Felix-Weil test becomes positive from the seventh day on, reaching the peak, and then becomes negative again. When the Felix-Weil test is at its peak, the complement-fixation test is on the downward curve.

S. W. Bohls, director of the State Health Department Laboratory, described the typhus fever control work in Hallettsville, Texas, where rat poisoning was used. He stated that this procedure had been found to be much faster in eliminating the animal reservoir of infection.

O. J. Potthast, discussing the subject, advocated the use of sodium cacodylate in typhus control.

The subject was further discussed by J. W. Oxford, Floresville.

Other Proceedings.—President H. M. Bush introduced Mr. Nat Goldsmith, of San Antonio, who in turn presented Mr. Hubert Green, a San Antonio lawyer who had done considerable work in drafting an amendment to be voted on in coming elections in Bexar County to raise funds for tuberculosis control, and for the Robert B. Green Hospital. Mr. Green discussed tuberculosis control in San Antonio. He emphasized the fact that charity sources had failed to supply sufficient funds to carry on a satisfactory program, and that the legislature in its last session had passed a law allowing the city and county to raise such funds if the taxpayers desired, provision being made that funds must be spent as specified.

R. G. McCorkle moved that the Society endorse the tax program as presented by Mr. Green, which motion was seconded by Conn Milburn and passed.

El Paso County Society

September 10, 1945

(Reported by J. D. Martin, Secretary)

Twenty Thoracoplasties: Case Reports with Lantern Slides—R. B. Homan, Jr., El Paso.

El Paso County Medical Society met September 10 at the Hotel Cortez, El Paso, with Sam R. King, president, presiding. The scientific program as given above was carried out.

The paper of R. B. Homan, Jr., on thoracoplasties, with case reports, was discussed by J. W. Laws, Leigh Wilcox, Jesson L. Stowe, and Steve Turner.

Members of the Society were invited to attend the tumor clinic each Tuesday at noon, at the El Paso City-County Hospital, under the direction of L. O. Dutton.

Announcement was made that the late Dr. Stephen T. Turner, of El Paso, had bequeathed his spacious home to be used as a meeting place and library of the Society. President King appointed George Turner, E. J. Tummins, and James Gorman as a committee to attend to this bequest to the Society.

Col. Thomas E. Scott, M. C., U. S. A., Ret., was elected to membership. Colonel Scott's membership on the El Paso City-County Hospital Board of Health was approved by unanimous vote.

Gray-Wheeler Counties Society

August 16, 1945

(Reported by H. L. Wilder, Secretary)

Convalescent Training Program at the Pampa Army Air Field—Lt. John George, M. C., A. U. S.

Experiences in Dentistry in the Pacific Theater—Capt. K. L. Hoefut, D. C., A. U. S.

Postoperative Complications and Early Ambulation in Postoperative Cure—Major M. S. DeWeese, M. C., A. U. S.

Practical Points in Clinical Examination of the Heart—Capt. Willard Holt, M. C., A. U. S.

Operational Fatigue: Problems in Adjustment to Civil Life—Lt. Col. E. M. Smith, M. C., A. U. S.

Gray-Wheeler Counties Medical Society met August 16, at the Pampa Army Air Field, as guests of the medical staff, with twenty-seven present. The scientific program as given above was carried out. It was interesting and instructive.

Prior to the scientific program, members of the Society were guests at a fried chicken dinner served in the mess hall. During the dinner, Sgt. Sedrick Pihl entertained with piano numbers and humorous stories on doctors.

Hidalgo-Starr Counties Society

September 13, 1945

(Reported by Ottis Walker, Secretary)

Recent Advancement in the Treatment of Syphilis—Capt. Mary Walton, U. S. Public Health Service, Director, Hidalgo County Health Unit.

Hidalgo-Starr Counties Medical Society met September 13 at the Edinburg Hotel, with fourteen physicians present. The scientific program as given

above was carried out. The very interesting presentation of Captain Walton on recent advancement in the treatment of syphilis was discussed by all members present.

Jefferson County Society

August 13, 1945

(Reported by L. R. Byrd, Jr., Secretary)

Pertinent Problems in Obstetrics and Gynecology—W. R. Cooke, Professor of Obstetrics and Gynecology, University of Texas School of Medicine, Galveston.

Jefferson County Medical Society met August 13 at St. Mary's Hospital, Port Arthur. The scientific program as given above was carried out. The paper presented by Dr. Cooke, guest speaker, was discussed by Charles H. Todd, Jr., John Martin, T. W. Young, H. B. Eisenstadt, Hugh E. Alexander, and E. G. Ward.

Other Proceedings.—A proposed amendment to the by-laws, presented by W. D. Brown at the July 9 meeting, was brought up for consideration. Following discussion, the amendment was revised to read as follows: "Beginning with the year 1946 the regular meetings of the Society will be dispensed with in the months of June, July, and August, and the business of the Society will be carried on by the executive committee during these months as needed and as permitted by the constitution and by-laws." On motion of C. M. White, seconded by E. D. Mills, the amendment as corrected was adopted. Communications from Group Hospital Service, Inc., and the National Physician's Committee were read. The latter communication was referred to the Public Relations Committee.

AUXILIARY NOTES

Officers of the Woman's Auxiliary to the State Medical Association of Texas: President, Mrs. C. B. Alexander, San Antonio; President-Elect, Mrs. George Turner, El Paso; First Vice-President, Mrs. S. M. Hill, Dallas; Second Vice-President, Mrs. L. W. O. Janssen, Corpus Christi; Third Vice-President, Mrs. Troy A. Shafer, Harlingen; Fourth Vice-President, Mrs. Mark H. Latimer, Houston; Treasurer, Mrs. F. R. Rugeley, Wharton; Recording Secretary, Mrs. Paul H. Power, Waco; Corresponding Secretary, Mrs. Wilbur Robertson, San Antonio; Publicity Secretary, Mrs. E. L. Howard, Fort Worth; Parliamentarian, Mrs. W. R. Klingensmith, Amarillo.

AUXILIARY NEWS

Henderson County Auxiliary met August 14, at the home of Mrs. W. T. Black, Athens, with Mrs. C. M. Weekley and Mrs. W. D. Geddie as cohostesses. Mrs. R. E. Henderson presided over a business session.

Roll call was responded to by each member present with items of what is new in medicine.

Mrs. J. K. Webster reviewed an article entitled "Dallas Scientists in Research for Actual Fountain of Youth."

A memorable feature of the meeting was the announcement of Japan's acceptance of the Allied ultimatum. Refreshments were served during the social hour.—Mrs. C. M. Weekley, Secretary.

BOOK NOTES

[1]Endocrinology of Woman. By E. C. Hamblen, B. A., M. D., F. A. C. S., Clinical Professor of Endocrinolgy and Associate Professor of Obstetrics and Gynecology, Duke University School of Medicine; Chief of the Endocrine Division and Endocrinologist, Duke Hospital, Durham, N. C. Cloth, 571 pages. Second edition. Price $8.00. Springfield, Illinois, Charles C. Thomas, Publisher, 1945.

[1]Reviewed by A. Louis Dippel, M. D., Houston, Texas.

Dr. Hamblen's first edition, Endocrine Gynecology, 1940, has not been refurbished but has been completely revised and rewritten. This second edition has been streamlined and is more practical than the first edition. The decrease in endocrine research during the war has allowed the clinician an opportunity to digest, assimilate and more thoroughly employ the rich prewar diet of fundamental discoveries. This volume is the result of a tremendous amount of original research work done by the author and others and includes his clinical impressions. It is certainly an authoritative treatise and is complete in every respect. Its style is such that it can be readily grasped and its content so broad that it is equally suitable for medical student, house officer, general practitioner of medicine, and specialist in gynecology.

In each division there are definitions which precedes the discussion and the terminology used is strictly scientific. There has been a very loose use of the term "menstruation" and of the various forms of abnormal uterine bleeding. It is most gratifying to see Dr. Hamblen throw overboard the older definition of menses and to join the ranks of the followers of Dr. Robert Meyer in this and in other respects. Under the teachings of such a seasoned teacher, researcher, and clinician as Dr. Hamblen, we should soon see menses described as only that cyclic uterine bleeding which is associated with shedding of the secretory phase of endometrium, that is true menstruation, presupposing ovulation, leaving anovulatory uterine bleeding as abnormal. Furthermore, it is most stimulating to see Dr. Hamblen discard the term "meno-metrorrhagia" and to condemn it as meaningless, which it is.

This book is well organized, being divided into five parts. The first deals with history, embryology, anatomy, chemistry, and other general subjects. The inclusion of the testis is justified on the basis that detailed knowledge of the male gonad is essential to a thorough understanding of the problems of sterility, virulization syndromes, androgen therapy of women, and intersexuality.

In the second part, the physiologic functions of the various glands are applied to the characteristic biology of the female beginning with antenatal growth and extending through each period of extrauterine life to sexual regression. Part three considers the various clinical and laboratory methods for the diagnosis of normal and abnormal levels of endocrine function, normal levels being particularly stressed.

The fourth part takes up the known diseases of function of the various endocrine glands of woman. Particular attention is given to the effect of these diseases upon the sexual and reproductive functions of woman.

Part five applies the facts and theories of endocrinology to functional disorders and to diseases of both gynecology and obstetrics. Endocrine therapy is presented as practical. Detailed schedules are often given. Hamblen's boldness in branding fanciful therapeutic vagaries as unnecessary, meddlesome, harmful, or even useless is to be admired. His vigorous and certainly justified opposition to the use of androgens in the treatment of woman stands out boldly in this section. His outline of the handling of the sterile couple is as up to date as any problem presented.

The final chapter deals with commercial preparations of endocrine products. This list should be of much value to all not thoroughly familiar with the various trade names of similar products manufactured by different drug houses. Those which are generally accepted as being of little therapeutic value and those marketed by concerns which have no Council accepted products are omitted.

[2]**Synopsis of Diseases of the Heart and Arteries.** By George R. Herrmann, M. S., M. D., Ph. D., F. A. C. P., Professor of Medicine, University of Texas. Director of the Cardiovascular Service, John Sealy Hospital; Consultant in Vascular Diseases, U. S. Marine Hospital. Fabricoid, 516 Pages, with 103 Text Illustrations and 4 Color Plates. Price, $5.00. St. Louis, The C. V. Mosby Company, 1944.

This is a concise text on diseases of the heart and the peripheral vessels, that for the most part contains only what is practical for the medical student, the general practitioner and the cardiologist without necessitating the reading of much history and strictly nonessential material. This makes the text handy for quick reference for the busy physician.

The book contains well written chapters on the diagnosis and treatment of the various heart disorders, both organic and functional. A portion of the text is devoted to the interpretation of various laboratory tests used in determining the diagnosis and prognosis in heart disease. Among these tests are the circulation time, venous pressure, vital capacity, radiologic study of the heart, roentgenkymograms, electrocardiograms, and other important tests.

The text of this, the third edition, has been revised and brought up to date. Several new chapters have been added. These are "Nervous Disorders with Heart Manifestations," "Blood Pressure Abnormalities," "Essential Hypertension," and "General Systemic Types of Heart Disease." The part of the text on peripheral vascular diseases is especially well written and complete. It contains, among other things, a description of "Immersion Foot," a disturbance of the circulation found all too commonly in the recent war, in those whose feet had been immersed in cold water for too long a period.

The book ends with a concise summary of the significance of changes in the unipolar central terminal precordial leads of the electrocardiogram as developed by Frank N. Wilson, F. D. Johnston, and their associates. This feature is a handy reference for the cardiologist, but as it is not illustrated graphically, it may seem a little too technical to the average general practitioner.

The text is based on Dr. Herrmann's lectures on cardiology at the University of Texas. The author's numerous experimental works, his years in teaching and in the practice of cardiology have made possible this useful work.

[2]Reviewed by Merritt B. Whitten, Dallas, Texas.

DEATHS

Dr. William Frank Long, of Sulphur Springs, Texas, died of pneumonia August 12, 1945.

Dr. Long, the son of W. W. and Callie (Kennemur) Long, was born May 10, 1893, in Hopkins County, Texas, and lived there until his death. He attended the public schools of Sulphur Springs and King's Institute. His medical education was received at the University of Tennessee Medical School, from which he received the degree of doctor of medicine in 1915. He returned to Sulphur Springs to practice with his father, the late Dr. W. W. Long, who had founded the Long Hospital in 1910. The hospital was sold upon the death of Dr. W. W. Long in 1942 to Dr. S. Byrd Longino and is now known as the Longino Hospital, but Dr. Frank Long continued to maintain his offices there until his death. Dr. Long served one year as a first lieutenant in the Medical Corps of the United States Army during World War I.

Dr. Long had been a member of the State Medical Association and the American Medical Association, through the Hopkins County Medical Society, since 1916. He had served as county and city health officer. He was a member of the Methodist Church and of Kappa Psi fraternity. He was a Mason and an Odd Fellow. His hobbies were hunting and fishing.

DR. WILLIAM FRANK LONG

Dr. Long was married to Miss Annie Rooney Worsham in Sulphur Springs on October 24, 1916. He is survived by his wife and three brothers, Noel Long, Marshall; Magee Long, Sulphur Springs; and Lester Long, Dallas. He was preceded in death only six weeks by his mother.

Lt. William E. Strube, M. C., U. S. N. R., of Fort Worth, Texas, was killed April 29, 1945, when a Japanese kamikaze plane made a direct hit on the destroyer Hazelwood one hundred miles off Okinawa. The commander of the craft, Lieutenant Strube, and the pharmacist's mate who was to have helped him were killed instantly, and when the wrecked ship was brought into Pearl Harbor, seventy-seven officers and men were dead or missing.

LT. WILLIAM E. STRUBE

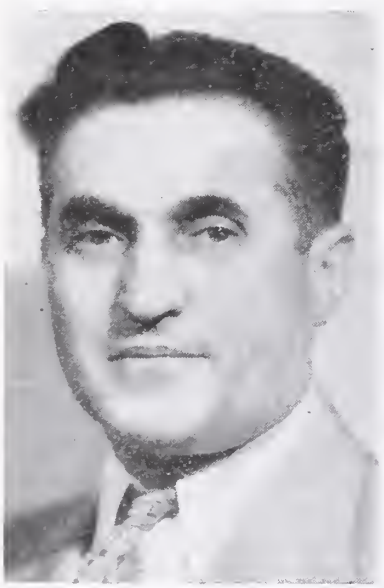
Lt. Strube was born April 19, 1914, in Fort Worth, Texas, the son of Ernest Faye and Mary Ellen (Finch) Strube. His academic education was obtained in the Fort Worth public schools and Texas Christian University, from which he was graduated with a B. S. degree in 1936. His medical education was received in Baylor University College of Medicine, Dallas, from which he was graduated in 1941. One month after graduation he was commissioned as a medical of-

ficer in the United States Naval Reserve and served an internship in the United States Naval Hospital, Great Lakes, Illinois, from July 1, 1941, to July 1, 1942. He was continuously on active duty in the service until his death. He served as medical officer on the U. S. S. Hazelwood from April 22, 1943, to April 29, 1945. He was a wearer of the purple heart, the Asiatic Pacific ribbon with ten battle stars, the Philippine Liberation ribbon with two battle stars, and the American Defense service medal. He had also been cited for extraordinary heroism by Admiral Nimitz, for which he received the Navy and Marine Corps medal. After usual methods of rescue failed, Lieutenant Stube had gone over the side of his ship to rescue an unconscious pilot floating in the water. He later went into the sea in a diving suit to search for other survivors in the wreckage of the pilot's plane and succeeded in bringing back a second man. Both of these men recovered. He was a member of Phi Beta Phi medical fraternity and the Baptist Church.

Lieutenant Strube was married August 17, 1940, to Miss Mary Ruth Clark of Fort Worth. He is survived by his wife and a daughter, Mary Sue, born October 30, 1942. He is also survived by a sister, Miss Rhoba Faye Strube, and his father. His mother preceded him in death October 28, 1944. Her death was unknown to Lieutenant Strube for almost a month as he was at that time engaged in the Battle of the Philippine Sea.

Dr. Louis Hyman Roddy, of Waco, Texas, died suddenly August 20, 1945, of heart disease.

Dr. Roddy was born March 26, 1888, in Lithuania, the son of Baruch and Mary Roddy. He came to the United States at the age of two and one-half years. His academic education was received in the Baltimore City College, Baltimore, Md. His medical education was obtained at the University of Maryland, from which he was graduated in 1909. He began the practice of medicine in Cameron, Texas, where he remained for four years. He then moved to Waco, where he had been in active practice for the past thirty-two years, until his death.



DR. LOUIS HYMAN RODDY

Dr. Roddy had been a member for many years of the State Medical Association and American Medical Association, through the Milam County Medical Society during his residence in Cameron and the McLennan County Medical Society after his removal to Waco. He had been a member of the staff and of the board of directors of City Hospital and Hillcrest Memorial Hospital, Waco. He had served as medical examiner for Selective Service throughout the war. He was a member of the board of directors of the Humane Society and the Salvation Army. He was a member of Temple Rodef Sholem, and a Mason. He was also a member of Phi Delta Epsilon fraternity.

Dr. Roddy was married December 18, 1913, to Miss Elsie Simmons, of Waco, Texas. He is survived by his wife; a daughter, Mrs. Philip Sanger, Waco; a son, Dr. W. N. Roddy, now serving an internship in Lincoln Hospital, New York City; two brothers, C. Roddy and Sam Roddy, Temple; and two sisters, Mrs. B. Goldberg, Fort Worth, and Mrs. E. Toomin, Beaumont.

Dr. Luke William Price, of Graham, Texas, died at his home July 28, 1945, following an extended illness.

Dr. Price was born October 20, 1873, at Toco Pola, Miss., the son of Isaac and Carolyn Virginia (Nance) Price. He received his academic training in the Toco Pola Public School and at Oxford University, Oxford, Miss. His medical education was received at the Memphis Hospital Medical College, Memphis, Tenn., his degree being conferred in 1895. Dr. Price practiced first in Eliasville, Texas, staying there from 1895 to 1904. From that time until shortly before his death he practiced in Graham, except for short periods spent in Ennis, Waco, and Cleburne.

DR. LUKE WILLIAM PRICE

Dr. Price had been for many years a member of the State Medical Association and American Medical Association through the county medical societies where he resided, primarily Young County Medical Society. He served as president of the Young-Jack-Archer Counties Medical Society in 1938. He had worked with the Selective Service Board of Young County during World War II. He was a member of the Baptist Church.

Dr. Price was married to Miss Evie Hardy in Toco Pola, Miss., in 1895, and is survived by a son of this union, Hardy Price, of Shreveport, La. Following the death of his wife in July, 1924, he was married in Bowie, Texas, August 4, 1926, to Miss Vera Louise Precise, who survives him. He is also survived by a sister, Mrs. F. Lester, Tampa, Fla.

Dr. John Brooks Stafford, of Angleton, Texas, died June 11, 1945, following an extended illness with thrombo-angiitis obliterans.

Dr. Stafford was born October 5, 1874, the son of Joseph Seth and Nannie (Brooks) Stafford. His medical education was received in the Medical Department of the University of Texas, Galveston, which he attended two years, and Tulane University, New Orleans, from which he was graduated in 1899. He served an internship at Charity Hospital, New Orleans, La., and then practiced medicine in Galveston before removing to Angleton about 1923. He was in active practice in Angleton until his death.

Dr. Stafford had been for many years a member of the State Medical Association and American Medical Association, through the Galveston County Medical Society during his residence in Galveston and through the Brazoria County Medical Society after his removal to Angleton. He had served the Brazoria County Medical Society continuously as secretary from 1933 until his death. He had also served as acting chairman of the Procurement and Assignment Advisory Committee for Brazoria County from shortly after the outbreak of war until his death. He had been county physician for the past ten years and was medical examiner for Selective Service during the war.

DR. JOHN BROOKS STAFFORD

Dr. Stafford is survived by two sisters, Mrs. Jeannetta Bennett and Mrs. Annie Laura Gayle, Angleton.

Dr. Judge Gaut Hambright, of Roby, Texas, died in a Sweetwater hospital May 28, 1945, of malignancy of the prostate.

Dr. Hambright was born May 4, 1862, at Flint Springs, Tenn., the son of Benjamin and Jane (Mitchell) Hambright. He received his medical education in the University of Louisville, Ky., graduating with the degree of doctor of medicine in 1891. In later years he did postgraduate work in such centers as New York University Medical College. Dr. Hambright moved to Texas after receiving his degree and began practice in Fisher County. With the exception of the period between 1895 and 1897, when he served at Hartshorn in the then Indian Territory, now Oklahoma, Dr. Hambright practiced continuously in Fisher County until his retirement in 1943, almost all of that time in Roby. In the early days Dr. Hambright by horse and buggy visited patients in a territory extending from the Brazos River in the north to the Colorado in the south, and east and west for a similar distance.

DR. JUDGE GAUT HAMBRIGHT

Dr. Hambright was for many years a member of the Fisher County Medical Society, and after their organization, of the Nolan-Fisher and Nolan-Fisher-Stonewall Counties Medical Societies, of the State Medical Association, and American Medical Association. He was president of the Nolan-Fisher-Stonewall Counties Medical Society in 1930-1931. He had been health officer for Fisher County and medical examiner for Selective Service. He had been a member of the city commission of Roby, and was a member of the Presbyterian Church, Woodmen of the World, and a Mason.

Dr. Hambright was married December 31, 1891, in Fisher County, Texas, to Miss Mollie Ann Luttrell, who preceded him in death in 1942. He is survived by five daughters, Mrs. Hugh P. Simmons, Amarillo; Mrs. Roy Duckett and Mrs. W. L. Corhn, both of Sweetwater; Mrs. J. O. Kennedy, Rotan; and Mrs. Kirk F. Allbright, Colton, Calif.; and by two sons, Robert Floyd Hambright, Minneapolis, Minn., and J. Gaut Hambright, Jr., Sweetwater. A sister, Mrs. Lou Barlow, Roby, also survives.

Captain Samuel Hugh Lumpkin, U. S. A., of Amarillo, Texas, died in a Japanese prisoner of war camp in Thailand on August 1, 1943. News of his death was received by his parents from the War Department July 2, 1945.

Dr. Lumpkin was born in Amarillo, February 12, 1913, the son of Mr. and Mrs. Alex A. Lumpkin. He attended the public schools there, Amarillo College, New Mexico Military Institute, Tulane University, and Baylor University, receiving his degree of doctor of medicine from the latter institution in 1937. During his senior year in medicine, he was associated with the Dallas Medical and Surgical Clinic as an extern. Following his graduation he served an internship at Baylor University Hospital, Dallas. He then practiced in Amarillo in association with the late Dr. A. F. Lumpkin until he was called into active service.

CAPT. SAMUEL HUGH LUMPKIN

Dr. Lumpkin was commissioned a first lieutenant in the medical corps December 14, 1939, and was assigned to the medical detachment of the 131st Field Artillery, Texas National Guard. He trained at Brownwood with the 36th Division. On November 11, 1941, the 131st Field Artillery was split up and

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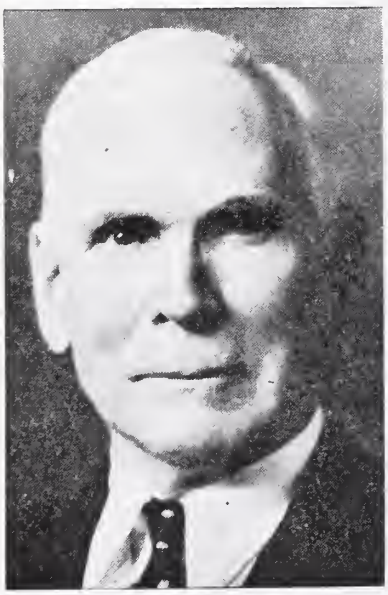
the battalion now known as the "lost battalion" was organized with Dr. Lumpkin as a member. He was promoted to a captaincy in January, 1942, about the time his battalion landed in Java. He was taken prisoner in the fall of Java on March 8, 1942, and was confined in a Japanese prison camp at Moulmein, Burma, later being transferred to the camp in Thailand, where he is reported to have died.

Dr. Lumpkin was a member of the State Medical Association and the American Medical Association, through the Potter County Medical Society. He was entered as a member of the Junior Candidate Group of the American College of Surgeons. He was a member of the Kappa Alpha fraternity in Tulane University.

Dr. Lumpkin was married December 31, 1939, in Amarillo to Miss Mary Gean Kelly. He is survived by his wife; his parents; two sisters, Mrs. Norwood West and Mrs. Ralph Carroll; and a brother, Tom Lumpkin, all of Amarillo.

Dr. A. Judson James, of Houston, Texas, died August 25, 1945, at his home of heart disease.

Dr. James was born January 22, 1861, near Dodgeville, Wis., the son of the Rev. W. E. and Hannah (Edmonds) James, recent immigrants from Wales. He came to Texas with his parents in 1872. His academic education was received in the public schools, the Sam Houston Normal Institute, Huntsville, from which he was graduated in 1884, and the University of Texas, from which he received a bachelor of science degree in 1890. After teaching in the public schools for a few years, he decided upon medicine as a vocation and entered the medical department of the University of Texas, Galveston, from which he was graduated in 1899. He located in Houston for the general practice of medicine, which was his home the remainder of his professional life.



DR. A. JUDSON JAMES

Dr. James had been a member for many years of the Harris County Medical Society, State Medical Association, and American Medical Association. He was elected an honorary member of the State Medical Association in 1935, which membership status continued until his death. He was also a member of the South Texas District Medical Society. He was local surgeon for the San Antonio and Aransas Pass Railway Company, and after it was absorbed by the Southern Pacific, he became local surgeon for that system. He was a charter member of the Texas Academy of Science and a member of the Houston Outdoor Nature Club. For several years he served as secretary of the Federal Board of Examiners for Pensions for Houston.

Dr. James was married in 1893 to Miss Annie C. Moore, of Dallas, who died in 1930. He is survived by two daughters, Mrs. Gillian James Suhr and Miss Edith Moore James, and two sons, Louis L. James and Robert J. James, all of Houston. Also surviving are two brothers, F. W. James, Bowie, and J. W. James, Plainview; one sister, Miss Bertha James, Fort Worth; and one grandson, Robert Logan James, Houston.

Dr. John Edwin Manney, of San Antonio, Texas, died May 27, 1945, several days after an emergency operation for intestinal obstruction.

Dr. Manney was born in 1872 at Alto, Texas, the son of James W. and Malinda (Harry) Manney. His academic education was received at Stockton Normal College, Stockton, Calif. His medical education was obtained in the medical department of Baylor University, Dallas, from which he was graduated in 1904. He did postgraduate work at Tulane University, New Orleans; Sewanee University, Sewanee, Tenn.; and Chicago Eye, Ear, Nose, and Throat College, Chicago. Dr. Manney began the practice of medicine in Falls County, Texas. In 1906 he moved to Tucumcari, N. M., but returned to Texas in 1916, locating in Waco. With the exception of a period of service overseas during World War I as a captain in the Army Medical Corps, Dr. Manney remained in Waco until 1938, from 1932 to 1938 holding government positions. In 1938, Dr. Manney resumed private practice in San Antonio, where he spent the remainder of his life.

DR. JOHN EDWIN MANNEY

Dr. Manney was for many years a member of the State Medical Association and American Medical Association, through the McLennan County Medical Society during his residence in Waco and through the Bexar County Medical Society after locating in San Antonio. Dr. Manney was a member of the Presbyterian Church, serving as an elder for almost thirty years. He was a Mason, a charter member of the American Legion, a member of the National Sojourners and of the Veterans of Foreign Wars and a lieutenant colonel in the Medical Reserve. He served as county chairman of the Citizens Military Training Corps in McLennan County for six years, and in World War II was associate surgeon at Duncan Field in 1942 and an examining physician for Selective Service for the war's duration.

A first wife, the former Miss Janie Helm, died while Dr. Manney was in New Mexico. In 1918 he married Miss Elzie Word, of Waco, who survives. Also surviving are one son, Dr. Willis E. Manney, a lieutenant colonel serving overseas; four daughters, Mrs. Jewel Sample, Mrs. Johnie Brock, and Mrs. Edwina Patterson, all of San Antonio, and Mrs. Lucille Truly, Dallas; and one sister, Mrs. Annie M. Nichols, San Antonio.

Texas State Journal of Medicine

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[1]Deceased.

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

The "Maternal and Child Welfare Act of 1945," known otherwise as the Pepper Bill (S. 1318), is pending in Congress and by the time this discussion reaches our readers will be in the big middle of things. Hearings on the bill are due to begin at any time. This legislation is a vicious extension of the EMIC program, by now well known to every doctor in the State of Texas, not to mention the nation. If any of our readers are interested in blocking this legislation, they should lose no time in communicating with their Senators and Representatives in Congress accordingly.

The Legislative Committee of the State Medical Association of Texas has emphatically and unreservedly condemned this measure as an abortion of the practice of medicine through private enterprise, and as an invasion of the police powers of the several states of the Union. There are other objections and all of them can be broken down into a mass of unsavory detail. A careful reading of the bill with a consideration of the implications and possible ramifications of the language will definitely disclose how harmful such legislation would be, not only to the medical profession but, in the main, to the people, who must in the final analysis rely upon the medical profession for service. In this connection, it may be observed that not all of the people who patronize the cults and quacks have severed all connection with their family physicians, and withdrawn their reliance upon the scientific medical profession.

While it is not feasible in an editorial discussion to go very greatly into detail, we feel that certain outstanding features of the "Maternal and Child Welfare Act of 1945" should be mentioned, if of necessity merely in passing.

It will be remembered that the EMIC program provides maternal and infant care for the wives and small children of certain grades of service men. It will be recalled that the State Medical Association at first gave its approval of the idea and agreed upon a plan which would carry out the purposes of the act without any particularly harmful effect, and that the Children's Bureau at Washington would not agree to this plan, arbitrarily demanding changes which were not agreeable to the medical profession. Certain requirements were exacted of the states which could not be complied with legally by the State of Texas, which remained out of the picture for a time. This brought about severe criticism not only of the State Health Department, but of the medical profession of the state as well. These criticisms were assuaged by certain arrangements at Austin, and by the act of the Executive Council of the State Medical Association, in leaving the whole matter to the individual physician. There are probably other features of this service which will be remembered as well or better.

The Pepper bill now pending in Congress calls for a total appropriation of $100,000,000 for the fiscal year ending June 30, 1946, and thereafter for as much money as may be necessaary to operate. Of the initial appropriation, $50,000,000 are earmarked for maternal and child welfare services; $25,000,000 for crippled children; $20,000,000 for

child welfare services, and $5,000,000 for certain administrative expenses. There is a distinction between the two services mentioned, but it may easily be that they will overlap to such an extent as to make the differences immaterial. In short, the Children's Bureau, which is due to be the administrative agency on the federal level, will likely be able to do anything it wants to which is at all related to the welfare of mothers and children, whether health or otherwise. In each particular the police powers of the states, reserved to the states under the Federal Constitution, are invaded. Directives, rules, and regulations authorized under this measure will, as do all other such federal mandates, have the effect of law, unlike the situation in any of the states—at least any of which we know. In the states, any police power must be regulated by law, and not by administrative or executive compilations. The reason for that is understandable. The people are entitled to know, both in advance and after the enactment, just what their laws are and the ground they cover. They cannot of certainty know about directives and the like, and can have no influence in their initial arrangement or possible rearrangement in the future.

The purpose of this bill is divided into three titles, and they overlap in many particulars, so much so that almost anything can happen, as has already been stated. The basic purpose is the care of the mother and child, including medical, nursing, dental, hospital, and related services. The child is anyone under twenty-one years of age (which is something in itself). There can be no discrimination because of race, creed, or color, or of national origin, and no requirements as to residence. How deeply this requirement will dig into the "fair practice" requirements of the war time period, which, incidentally, are about to be extended into the post-war period, is an interesting speculation. There are implications, and there may be ramifications of disturbing sort in any section of the country. Even school health service is included. Any condition likely to interfere with the normal growth and development, or educational progress may be corrected. Demonstration projects, whatever that may mean, in the field of maternal and child health are authorized, and, not the least of the dangerous provisions of this measure, the government may train its own professional and technical personnel. We may have another sort of practicing physician, nurse, or medical technician in the not very distant future. Of course, all of these things must be done under plans set up by the states and approved by the Chief of the Children's Bureau, not by any group, but by the Chief (at the present time) herself. A provision is made for a conference between the Chief of the Children's Bureau and state health officers, not to mention a general advisory committee, composed of professional and public nurses, and if necessary, a technical advisory committee which the said Chief of the Bureau will appoint. It is well known just how far these conferences and the advice of special committees go in the formulation of policy of any sort of a federal bureau.

The second title of the bill has to do primarily with crippled and otherwise handicapped children, or children suffering from ailments which lead to such conditions. Provisions are made for locating such children, and for diagnosis, corrective measures, whether specific or otherwise, and hospitalization and after-care. There is the usual provision for training of personnel and demonstration projects. The distinction between this portion of the bill and the first portion is the difference between maternal and child service and service to crippled children as such.

The third title concerns itself with setting up and developing statewide programs for child welfare, including the extension and strengthening of child welfare services already in operation in the state, and the care and protection of children who do not have parental care and supervision and are apt to become neglected, delinquent, and dangerous children, in the matter of their association with other children. This is a most far-reaching provision, indeed. The states now find it necessary to set up correctional institutions, venereal disease prevention programs, and a great variety of measures looking to the prevention and correction of conditions complained of in this connection. Under the term "Child Welfare Service" are included guidance, social service, placement, supervision, and maintenance of foster-family homes for the care of indigent, neglected, or delinquent children, or children in danger of becoming neglected or delinquent. Children who might otherwise be detained in jail or who may be deprived of shelter and protection may be temporarily cared for. There is even money to pay the cost of transporting non-resident children receiving this service to their own home communities, where such costs may not otherwise be met.

Of course the state will be required to pay whatever the Chief of the Children's Bureau feels it should pay, and is able to pay, to cover this service. The contributions to the states will, therefore, vary, perhaps widely. No doubt, also, conditions under which the

states will operate will vary, except in the matter of certain practices in line with the policies of the Children's Bureau, which policies have been somewhat peculiar in spots, as far back as we can remember, and some of which may be counted upon to set up insurmountable obstacles between the service and the practice of medicine on the basis of free enterprise. It is certainly to be hoped that no such legislation will be enacted, and again we would urge that any of our readers who feel that way about it, express their feelings to their congressmen.

The Hill-Burton Hospital Construction Bill (S. 191), pending in Congress, has recently been approved by the Legislative Committee of the State Medical Association of Texas. It has previously been approved by the American Medical Association and the several hospital associations of national scope. In short, there seems to be no reason why the medical profession of the country should not lend its influence and its aid to this particular effort to insure the people of the country adequate health and medical attention and hospital service. It does not appear that the legislation intends to do more than to determine where help along such lines is needed, what help is needed, and then do something about it. While the setup will undoubtedly be conducive to the development of plans for medical service which may go "haywire," it is at the same time within the province and power of the medical profession to direct the activities involved into proper channels, from the viewpoint of medical ethics. All through the discussion by the medical profession and the hospital group which has heretofore taken place, the need for federal aid of some sort has been stressed, and at the same time the need of protecting the voluntary hospital system has been emphasized. The same reasoning applies to the need of protecting the practice of medicine on a private enterprise basis.

The Legislature of the State of Texas enacted a law during the last session, authorizing the installation and operation of hospitals on a coöperative basis. The State Medical Association of Texas raised no question about the measure while it was pending, for the reason that dependence in any such circumstance must be based on the medical profession, locally. If the doctors concerned in the operation of such a hospital will maintain the principles of medical ethics bearing upon the subject, there will be little danger of socialized medicine, or practices which will lead to socialized medicine.

The Hill-Burton Bill has a two-fold purpose, the first of which is to determine by state inventory just what hospitals are needed, where they are needed, what sort are needed, and where they will be self-supporting. At the same time, the need of clinics and medical service having to do with hospitals will be determined. The term "hospital" is broadly defined by the bill to include public health centers, and not only general hospitals, but such special hospitals as those devoted to tuberculosis, mental diseases, and a variety of chronic diseases. It also includes laboratories, out-patient departments, nurses' homes, and training facilities of every medical sort. Hospitals furnishing primary domiciliary care are definitely excluded. The term "public health center" is specifically defined in the bill as a publicly owned facility for the provision of public health service and medical care,* including related facilities such as laboratories, clinics, and administrative offices, operated in connection with public health centers.

An immediate appropriation of $110,000,000 is proposed by the bill to cover these activities. Of this amount, $5,000,000 are set aside to cover the cost of the surveys and planning, and $5,000,000 to cover administrative expenses in carrying out whatever plans are approved under the measure. The balance of the appropriation, $100,000,000, is set aside for the construction of such hospitals and related facilities as may be approved in connection with the survey.

The Surgeon General of the United States Public Health Service will be chairman of a council composed of eight members familiar with such matters, appointed by the Federal Security Agency. As a matter of fact, the Surgeon General will have authority to act, and the council will have authority to advise.

The states are required to set up administrative facilities and plans meeting federal requirements before they can participate in the movement. In Texas the State Board of Health was authorized by the Governor to direct the activities under the Hill-Burton Bill, and an Advisory Council to the State Board of Health, comprising a number of administrators of large hospitals over the State, was set up. Anticipating that a large number of questions of a medical nature, not directly pertaining to hospital administration, would surely arise in the course of the survey and the contemplated expansion and construction of hospitals, the Legislative Committee of the State Medical Association of

*EDITOR'S NOTE.—Since this writing, the Subcommittee of the Senate Committee on Labor and Education has re-written S. 191, reported it out to the Full Committee, which reported it to the floor of the Senate October 27. Among important features in the changes made was the modification of the definition of a public health center by limiting it to the provision of *"public health services."* The original bill had provided *"medical care"* as well. A detailed list of important changes made in the re-writing of the bill will be found on page 371 of this JOURNAL in the article entitled "A Report on Certain Bills Pending Before Congress."

Texas, by resolution, requested the Governor to add to the advisory council already appointed, a number of physicians representing the State Medical Association. The Governor very graciously received the committee from the State Medical Association which submitted these recommendations, and was apparently agreeable to the suggestion, provided the State Board of Health so recommended. We understand that the State Board of Health has unanimously approved the idea.

Perhaps it is well to emphasize here the importance of the participation in any decisions made under the Hill-Burton Bill, and in connection with the building of hospitals and the like, by representatives of the practicing medical profession. It is easy to understand how chambers of commerce, ambitious politicians, and enthusiastic welfare workers can bring about a harmful overbuilding of hospitals. There are hospitals over the state now which are closed and which were the result of such enthusiasm. On the other hand, it might easily be that the interests of a number of large hospitals in nearby cities might inhibit the construction of smaller hospitals in the smaller surrounding communities. The intervention of the practicing physicians in such situations should be helpful. The practicing physician very much desires hospital facilities, but he does not desire such facilities on a basis which will prove impracticable and ultimately inoperative. The management of a large urban hospital will welcome the smaller nearby hospitals as supplementary service, but it will not desire the reckless building of hospitals on an impracticable basis. The medical profession can help in adjusting all such situations.

Radio Talks Against Socialized Medicine Available.—As a part of its program to inform and thoroughly arouse the public regarding the malevolent features of the Wagner-Murray-Dingell bills, pending in Congress, which have for their purpose the socialization of medicine, two exceptionally fine talks on the subject by prominent Texas laymen have been made recently over the Texas State Network, comprising the following stations: WRR, Dallas; KFJZ, Fort Worth; KABC, San Antonio; KTHT, Houston; WACO, Waco; KTEM, Temple; and KNOW, Austin.

The first of these talks was made October 4, by Mr. Walter W. McAllister, a business man of San Antonio. Mr. McAllister's talk, entitled "Socialized Medicine and Its Pay Roll Taxation," appears in this number of the JOURNAL, page 340.

The second talk was made October 25, by Mr. R. L. Thomas, a Dallas business man, former chairman and at present a member of the Board of Regents of the State Teachers Colleges of Texas. The title of Mr. Thomas' talk was "Should Our Doctors be Regimented?" It will be published in the December number of the JOURNAL.

The medical profession of Texas is highly appreciative of the splendid public service rendered by these gentlemen.

While the Texas State Network covers Texas very well there are areas which it does not reach. In addition to making of record in the JOURNAL the outstanding contributions to the public welfare made by Mr. McAllister and Mr. Thomas, by their addresses, the other important purpose of this discussion is to advise that recordings have been made of each talk and will be made available, on request, to county medical societies for broadcasting on their local stations. Each of the records is fifteen minutes in length, or timed for such a broadcast period. These discussions are unbiased, convincing, and logical. They are particularly effective since they are by laymen.

County medical societies are urged to take advantage of this means of combating the threat of socialized medicine. Requests for the recordings should be made to the Public Relations Committee, 1404 W. El Paso Street, Fort Worth 3, Texas.

Medical Officers Returning to Texas from various branches of the Armed Services, who served in World War 2, just concluded, are listed in this number of the JOURNAL (pages 368 to 371), as their names have been assembled from a variety of sources, including Procurement and Assignment Service, reports from the Office of the Surgeon General, secretaries of county medical societies, and clippings from Texas newspapers. The present list includes the names of 169 Texas physicians from 40 county medical society areas.

The list has been compiled to show the number and names of physicians returning to each county medical society area, the branch of service in which each served, their present locations and locations prior to entry into service, and the approximate dates of release.

It is quite likely that some inaccuracies exist in this list. To eliminate them as far as possible, letters have been addressed from the Central Offices of the Association to each returning medical officer listed, furnishing him the data on hand and asking him to correct it, if necessary. The Central Offices, comprising the office of the State Secretary, JOURNAL, and Library, with their staffs, have joined with all members of the Association in welcoming these returning medical officers and urging that the Central Offices be called

upon in any way they can serve in helping these physicians to re-establish themselves again in civilian life and practice.

The JOURNAL has also asked that each returning medical officer before becoming too busy in practice, kindly furnish a record of his military experience in the war, beginning with the date of entry into service and carrying through until release from active duty, in as complete or concise detail as desired. Each medical officer has also been asked to furnish a glossy print photograph, 5 by 7 inches, which, with the other biographical data furnished, will be placed in the personnel files of the Association. These data may be invaluable when a history of Texas medicine is written.

Texas medicine is proud of the record made by its fellows in the war just concluded, as indeed it is of the record of all Texans in the war.

The list of medical officers returning from the war, begun in this number, will be continued in subsequent numbers until a complete record has been made. Corrections of this list from authoritative sources will be greatly appreciated.

The Oklahoma City Clinical Society will hold its fifteenth Annual Conference at Oklahoma City, November 26-29, both dates inclusive. This is definite. We have been advised that we may say to our readers that the program for the meeting will be complete, and equal in every respect to those of previous sessions. There will be the usual outstanding features which have proven so helpful and popular in the past, such as lectures, symposia, postgraduate assemblies, commercial exhibits, general round-table luncheons, dinner meetings, and entertainment. Those of our readers who have attended these clinics need not be advised further, and those who have not done so are assured that the event is quite worth while. It is the intention of those in charge to make the conference point to the needs of both the physician who has remained in practice throughout the war, and the physician who is returning from the war to civilian practice. A letter to Mrs. Muriel R. Waller, Executive Secretary, 512 Medical Arts Building, Oklahoma City 2, Okla., will get results.

CURRENT EDITORIAL COMMENT*

Chemotherapy in Tuberculosis.—Despite the rapid advance in the treatment of bacterial infections, there is at present no drug available which is definitely indicated in the treatment of human tuberculosis. However, recent investigations have revealed that the tubercle bacillus can be destroyed both in the test tube and in the animal body by newly developed drugs. Research in this field is of great interest since it may well lead to a successful treatment of human tuberculosis.

Shortly after the introduction of the sulfonamides, certain related compounds (promin, diasone, promizole) were found to possess considerable inhibitory properties against the tubercle bacillus in test tube experiments. These substances were effective also in the treatment of experimental tuberculosis of the guinea pig. However, clinical trials were disappointing. In addition to a very questionable curative effect, these drugs proved to be toxic when administered over a long period of time.

Since the introduction of antibiotics or antibacterial substances produced by microorganisms, their effect on the tubercle bacillus was carefully investigated. Penicillin had no effect whatever on the tubercle bacillus, but other antibiotics showed some promise.

Streptomycin, an antibiotic produced by Actinomyces griseus, has marked tuberculicidal effect in the test tube. It is a nontoxic substance, and it proved to be effective in the treatment of experimental tuberculosis of the guinea pig. Clinical trials were carried out at the Mayo Clinic and according to a recent report, it exerted a limited, suppressive effect in patients in both extrapulmonary and pulmonary tuberculosis. This substance is very scarce and difficult to produce; however, its production is being increased tremendously at the present time by certain chemical companies, and it may be available for clinical trials within a short time.

In addition to streptomycin, a number of substances produced by molds of the genus Aspergillus and also by B. subtilis possess marked inhibitory effects on the tubercle bacillus. Most of these substances are strictly in the experimental stage, but their importance lies in the fact that they will provide the organic chemist with new tuberculicidal structures which can be studied and modified in order to obtain therapeutically useful substances. From this standpoint, the frequent reports on new "Tb. cures" based on test tube experiments should not be underestimated, although they should be read with caution until there is clinical evidence of their usefulness.

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*This department of the JOURNAL presents editorial comments on current items pertaining to the science, art and practice of medicine, contributed by members of the State Medical Association and scientists closely associated with the medical profession of Texas. Invitation is hereby extended to any member of the State Medical Association of Texas to submit such discussions for this department. The discussions should not be more than 500 words in length.

SOCIALIZED MEDICINE AND ITS PAY ROLL TAXATION*

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In the past few years Americans have seen great curtailment of personal liberty with corresponding increase of federal government regulation and control. In that period we weathered a major depression and carried to a victorious finish a war that encompassed the world. In that period we likewise have had certain ideas advanced out of Washington for social betterment which, because of the war, were set aside as a post-war objective.

Among these programs is one that is extremely significant in that it affects the lives of every man, woman, and child in America: socialized medicine.

It is timely to speak of it now because the Wagner-Murray-Dingell bills have been introduced in Congress and are now pending before the Senate Finance Committee and the House Ways and Means Committee. This is a broad social security measure, patterned after a similar program advanced in England by Sir William Beveridge. As introduced by the three congressmen by whose names the legislation is known, every individual in the United States, except the penniless and indigent, would be given unemployment insurance and health insurance from the "cradle to the grave." Passage in its present form, in my opinion, would have an extremely adverse effect on every person gainfully employed. Let's analyze its benefits, its cost, and the effect on us as Americans and wage earners.

First, it covers practically every employed person, as well as all self-employed individuals.

It provides health insurance at a cost of 3 per cent of all wages or earnings up to $3,600 yearly, one-half paid by employees and half by employers.

Old age insurance is widely extended and provision is made for permanent disability. This costs employers and employees 1 per cent each of pay roll.

Unemployment insurance is broadened, with elimination of various state programs, all state funds being transferred to the federal government and consolidated into a huge federal government bureaucracy. This would cost employers and employees each 1 per cent of all pay rolls. Then, the United States Employment Service is likewise to be merged with the Social Security.

Temporary disability insurance and maternity benefits are also provided at a total cost of 1 per cent.

This makes the over-all cost 4 per cent on every employer and 4 per cent on every employee, while all self-employed would pay 5 per cent of their earnings, wages, or salaries to a maximum of $3,600 a year. That would possibly constitute a total annual cost of 8 billion dollars—more than the total pre-war cost of operating our federal government. However, these would not be all of the costs, because, as Senator Wagner admits, the premiums noted are largely estimates and deficits in the various programs would be made up by charges against general tax collections. Politicians drafting the bill are very careful not to refer to these compulsory take-outs from earnings as "taxes." They call them "contributions." They don't mention the word "compulsory" in the law. What the employee and employer must give is compulsory, nevertheless. By adroit usage of words, the bureaucrats in Washington have pasted a soothing syrup label on a bottle of nitroglycerine—but that doesn't make it any less explosive!

In addition to these insurance benefits funds are made available to the states, the federal government donating from 25 to 75 per cent of the cost, depending on the per capita wealth of each state, so that relatively larger grants are made to the poorer states. There are grants for public health programs, grants for hospitals and health centers, grants for maternal and child welfare, grants to the aged, grants to dependent children, grants to blind persons, and other needy persons, grants for general relief, grants for medical education and dissemination of knowledge. Seemingly, private "non-profit" organizations can also secure grants.

There is apparently no limit upon the affiliations or purposes of these private groups except that they must be ostensibly engaged in some field or activity covered by the bill. Religious groups, racial groups, fraternal orders, labor unions can also apparently go into the provisions of hospital, medical, and related services for their members and secure liberal grants from the federal government. The possibility of corralling the support of large bodies of voters represented in these various groups is too obvious to be overlooked. Time does not permit listing the many examples of superfluous treatment and propaganda about the object and purposes of the bill and the desirable result it is supposed to bring about, as set out in its 185 pages.

*EDITOR'S NOTE: Address delivered over the Texas State Network, composed of radio stations WRR, Dallas; KFJZ, Fort Worth; KABC, San Antonio; WACO, Waco; KTEM, Temple; and KNOW, Austin, on October 4, 1945, by Mr. McAllister, a San Antonio business man, as a public service. The address was recorded and broadcast over Station KTHT, Houston, also a part of the network, on October 5. The address was the first of a series of radio addresses arranged for by the Public Relations Committee of the State Medical Association of Texas.

Grants—grants—grants—sounds nice for our Uncle Sam to be giving and giving as long as you and I are on the receiving end. But—are we? Don't forget the federal government cannot create any wealth. It is only an agency to take from some and give to others. None except the completely indigent can ever hope to get anything from government for nothing; and, don't forget the indigent—that is the very poor—are *not* covered by this bill.

Every governmental benefit you and I receive is paid for by us whether we pay a large or small income tax. We contribute to the purchase of every necessity. Yes, even the sugar you buy has not one, but many provisions in it for federal taxes: tax on the growth of cane or beets, on the refining, the railways that transport it, and every middleman adds to the price of that sugar his cost of doing business, his taxes, and profit.

"Ah!" gloats the socialist and, of course, all socialists wholeheartedly support the Wagner-Murray-Dingell bills. "We want 'profit' eliminated from all transactions. That is why we favor government ownership and such extended government service as is provided for in this bill!"

Well, folks, the recollection is still quite fresh in my mind of how difficult it was to operate with all the government controls brought into being by the war. For one, I can recall a shortage in beef caused by poor government planning when there were more animals on the ranges and farms than ever before in our history. The shortage of pork unquestionably resulted from poor government planning. The sugar shortage is due to poor bureaucratic planning in 1941 and 1942—just to mention a few current examples.

Thomas Jefferson, founder of the Democratic Party, was eminently right when he said, "That government is best which governs the lives of its people least." Another great democrat, Grover Cleveland, stated a sound principle, which many in error are trying to get away from, when he said, "It is the duty of the people to support the government and not the duty of the government to support the people."

Bear in mind, please, government is something we have created—an agency to serve us, its citizens, and to make it possible for large numbers to live together in peace, in equity, and in health. To repeat—government does not create any wealth. What it gives to one, it must take from another in the form of taxes. It does not add one single dollar to our national income. The multiplication of payments does not make us a richer nation. In fact, we become poorer as our government becomes larger because the bureaucrats are not engaged in any operation that creates wealth. Do not overlook the fact that these payments for social security must come from the activities of producers. That means all who labor, all who manage, and all who are self-employed. This group I shall call "the workers" and in supporting this system they reduce their own incomes accordingly. There is no manna from heaven in this program. And, if you think government can get you more for your money than you can, gentle listener, you have a lot more credulity than I have.

I should think no one could fool himself after the past twelve years' experience with government alphabetical bureaucracies. Yet this program, if enacted, will build a "superduper" bureaucracy that will intimately reach into the privacy of every man's home. We Americans are so accustomed to talking in billions of dollars and have heard ourselves called "rich" so often that we consider ourselves rich.

Too few of us ever stop to think that most federal funds come from federal government borrowing. Government bonds are a claim against the tax collections of future years. Putting it another way, it means that your and my earnings—yes, even that of our children as well—in the years to come will be burdened with a first lien federal tax. To some it must almost seem ridiculous for me to question how heavy a load we Americans can carry. Yet this 8 to 10 billion dollar social security bill might become twice that amount because we have no accurate means of estimating the cost.

The doctors of our nation oppose the Wagner-Murray-Dingell bills not for selfish reasons, but simply because they know if this measure becomes law, the public health of Americans will suffer a dire calamity. The physicians feel that they should not stand idly by and see American medicine destroyed by any such fantastic and financially unsound idea coming from communist "crackpots." The doctors know that this legislation will destroy once and forever the cherished relations between doctor and patient, and more than that, will destroy all initiative for scientific advancement in skill and treatment.

Under this law no patient can select his own valued and trusted physician. He must take the services of some doctor, perhaps a total stranger to him, as designated under the list of federal tax practitioners. It is no exaggeration to say that in times of sickness, should these ideas prevail, the mother with a sick baby will be forced to call some federal bureau before she can obtain medical aid. Your doctor will be numbered, regiment-

ed, and put on call. There will be all too few federal doctors available to answer the multiple calls of these millions who think under federalized medicine they are entitled to call a doctor for a headache or when some youngster eats a green apple. Regardless of the merits of the bills there will not be enough doctors available to cope with this flood of what the thoughtless may deem a "something for nothing" service.

I am not a doctor—merely a layman as most of you listeners. But, I can see that if these bills become law, individual medical initiative will perish to the detriment of public health.

Americanized medicine will be just another federal bureau in Washington. What mother would like to have a sick baby attended by the O. P. A.? Who wants to call the federal building for an unknown regimented doctor when someone lies at the point of death? When you are facing a serious operation at present, you give a lot of thought to the selection of a skilled surgeon. You will not have to think, under the new law. Just call the post office building and some surgeon will be sent to you. You may never have heard of him, but he will operate just the same and charge it to the government. Does any one who gives thought to the matter believe that federal medicine with all the red tape that surrounds every existing federal bureau can give the tried and true service in the protection of public health that we have received in our present system of medicine?

Federal medicine in a way has been tried in the Veterans Administration since the end of World War 1. Doctors on the federal pay roll have administered to the needs of the sick and ailing. The conditions at veterans hospitals have become so objectionable as to cause national outcry against the treatment veterans have received. The *Cosmopolitan Magazine*, March issue, and the April issue of the *Reader's Digest* carried an article entitled "Veterans Betrayed." It gave specific instances of the poor treatment received, the incompetency and callousness developed in twenty years of federal medicine. Patients in veterans hospitals have suffered so terribly that the recent shake-up was inevitable. This is just an example of what it will be with American medicine if the Wagner-Murray-Dingell bills are enacted in their present form.

People say there is no alternative. Of course, there is an alternative—it lies in group and individual health insurance and in untrammeled medical practice. This source has given us almost miraculous surgical and medical aid, and has helped to increase the length of our lives, and lessen our mortality rate to an extent unequalled by any other nation in the world. These benefits are not the product of a government bureau, but are ours through the research of men of the medical profession and related sciences, working as individuals, who sacrificed themselves—many times actually giving their lives—that humanity may profit.

If you believe that a central government bureau should oversee, direct, and assume responsibility for your existence and that of your family, then the remarks I have just made have had no interest for you. But, here is a thought for you to keep in mind—remember that the so-called security afforded by government assumption of individual obligations comes high. It demands both monetary contributions, willingly or otherwise, and the surrender of personal initiative and freedom of action!

On the other hand, if you believe in private enterprise—a chance to work and profit from your own efforts—a choice of the channel through which you gain your livelihood and likewise the channels through which you spend your earnings—don't take this communist dose lying down! Let your congressmen and the editors of your newspapers know how you feel about this all important matter.

401 Navarro.

THE USE OF ALUMINUM-PENICILLIN MIXTURES IN MAINTENANCE OF BLOOD LEVELS OF PENICILLIN

II. Combination of Delayed Absorption by Use of Aluminum-Penicillin and Renal Blockage with Benzoic Acid

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In a previous paper[3] we reported on the use of potassium aluminum sulfate-penicillin mixtures as a method of delaying absorption of penicillin following intramuscular administration. It was found that single intramuscular injections of 50,000 units of aluminum-penicillin would maintain a therapeutic level of penicillin in the blood for six to nine hours, and that two injections of 50,000 units each at nine hour intervals was the minimum dosage to maintain a therapeutic level for eighteen hours. The use of aluminum-penicillin mixtures was found to be a safe and easy method of delaying absorption of the drug. Its use clinically in the treatment of gonorrhea has been very promising. We were interested, however, in studying a combination of delayed absorption and renal blockage in maintenance of blood levels of penicillin. Renal blockage, or depression of excretion of penicillin in the urine, has been

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TABLE 1.—*Blood Serum Concentrations of Penicillin Following Two 25,000 Unit Injections.*

Treatment	Patient No.	Blood Serum Concentrations of Penicillin in units per ml.				Diagnosis	Result
		3½ hrs.*	2½ hrs.*	6½ hrs.*	19½ hrs.*		
Group A. 2 injections of aluminum-penicillin of 25,000 units at 7 hour intervals; benzoic acid orally 2.4 Gm. 30 minutes prior to injection and 1.2 Gm. each 4 hours thereafter.	1	.5	.5	.25	.125	Syphilis and gonorrhea	Negative culture 24 hours†
	2	.5	.5	.125	.125	"	"
	3	.5	.5	.25	.07	"	"
	4	.5	.25	.25	.125	"	"
	5	.5	.25	.125	.07	Syphilis	----------
	6	.25	.25	.125	.07	Syphilis and gonorrhea	"
		4 hrs.	8 hrs.	4 hrs.*	16 hrs.*		
Group B. 2 injections of aluminum-penicillin of 25,000 units at 8 hour intervals; benzoic acid orally as in Group A.	7	.5	.24	.5	.125	Syphilis and gonorrhea	Negative culture 48 hours
	8	.125	.25	.5	.125	"	"
	9	.07	.07	.5	.125	"	"
	10	.07	.125	.25	.125	"	"
	11	.25	.125	.25	.07	"	"

*Hours after second injection.
†Clinical appearance of these patients 24 hours after treatment was satisfactory.

studied by a number of workers. Rammelkamp and Bradley[5] used injections of diodrast. Beyer and others[1] used para-aminohippuric acid and penicillin in simultaneous continuous intravenous infusions in dogs. They found that if the plasma level of the para-aminohippuric acid was maintained at 20 to 30 mg. per 100 ml., a plasma penicillin level of 0.08 to 0.1 unit per milliliter could be maintained when the infusion rate was 15 units of penicillin per minute. They found no evidence of toxicity due to infusion of para-aminohippuric acid in dogs. In a later paper Beyer and others[2] reported on clinical trial of the para-aminohippuric acid in man. They were able to demonstrate that in man the intravenous administration of sodium para-aminohippurate was capable of elevating several fold the plasma concentration of penicillin. Bronfrenbrenner and Favour[4] used benzoic acid administered orally to cause renal suppression of excretion of penicillin, benzoic acid being detoxified in the normal liver by conjugation with glycine to form hippuric acid, which was selectively picked up by the renal tubules. These authors found that low salt intake combined with oral doses of benzoic acid resulted in a four to eightfold increase in penicillin blood level with prolonged effective blood concentrations. They reported on the use of the benzoic acid by mouth, combined with one, two, and three-hour interval injections of penicillin. It appeared of interest to study a combination of single and double injections of aluminum-penicillin and oral administration of benzoic acid.

Twenty-one patients were used in this study. The patients in one group of 11 were given a primary dose of four 0.6 Gm. gelatin capsules of benzoic acid orally, followed in thirty minutes by an intramuscular injection of 25,000 units of aluminum-penicillin. A second 25,000 unit injection of aluminum-penicillin was given seven to eight hours later. Two 0.6 Gm. capsules of benzoic acid were given at four-hour intervals after the first aluminum-penicillin injection up to twenty-four hours. Another group of 10 patients received the same schedule of benzoic acid and only a single intramuscular injection of 50,000 units of aluminum-penicillin. Fluid intake was limited. Blood samples were collected at intervals up to twenty-eight hours and assays were run by the plate cylinder and test tube method.[6, 7] Hippuric acid determinations were made on part of these samples and only minute quantities of hippuric acid were detectable in the plasma. The results of the assays on the blood serum concen-

TABLE 2.—*Blood Serum Concentrations of Penicillin Following One 50,000 Unit Injection.*

Treatment	Patient No.	Blood Serum Concentrations of Penicillin in units per ml.				Diagnosis	Result
		4 hrs.	8 hrs.	12 hrs.	24 hrs.		
Group A. One injection of 50,000 units of aluminium-penicillin; benzoic acid orally 2.4 Gm. 30 minutes prior to injection and 1.2 Gm. each 4 hours thereafter.	1	.125	.125	.125	.125	Syphilis	----------
	2	.25	.125	.5	.125	Gonorrhea	24 hours Negatice culture
	3	.5	.125	.07	.125	"	"
	4	.5	.5	.125	.07	Syphilis and gonorrhea	"
	5	.07	.07	.25	.07	"	"
	6	.25	.125	.125	.125	Syphilis	----------
		4 hrs.	11 hrs.	15 hrs.	28 hrs.		
Group. B Same as in Group A.	7	.5	.125	.07	.07	Gonorrhea	Negative culture 24 hours*
	8	.5	.125	.125	.07	"	Positive culture 24 hours†
	9	.25	.25	.125	.07	"	Negative culture 24 hours
	10	.25	.125	.07	.07	"	Negative culture 24 hours‡

*Culture was negative but patient was not clinically clear.
†Culture was positive but patient looked clinically clear. No further treatment.
‡Negative culture but not clear of discharge. Received 150,000 units plain penicillin as further treatment.

trations of penicillin are presented in tables 1 and 2.

The blood levels of penicillin obtained in these two groups of patients are quite interesting. The combined action of delayed absorption and renal blockage resulted in maintenance of blood levels up through sixteen to nineteen hours with two 25,000 unit injections at seven to eight hour intervals and assayable blood levels up through twenty-eight hours with one injection of 50,000 units of penicillin. The blood levels were fairly high throughout the period, indicating that the two mechanisms were more effective than just delayed absorption alone, which was effective in maintaining blood levels up through six to nine hours as reported previously.

REFERENCES

1. Beyer, K. H., and others: The Prolongation of Penicillin Retention in the Body by Means of Para-aminohippuric Acid, Science 100:107-108 (Aug. 4) 1944.
2. Beyer, K. H., Flippin, H. F., Verwey, W. F., and Woodward, R.: The Effect of Para-aminohippuric Acid on the Plasma Concentration of Penicillin in Man, J. A. M. A. 126:1007-1009 (Dec. 16) 1944.
3. Bohls, S. W., and Cook, E. B. M.: The Use of Aluminum-penicillin Mixtures in Maintainance of Blood Levels of Penicillin. I. Intramuscular Injections of Aluminum-penicillin, Texas State J. Med. 41:249-252 (Sept.) 1945.
4. Bronfenbrenner, J., and Favour, C. B.: Increasing and Prolonging Blood Penicillin Concentrations Following Intramuscular Administration, Science 101:673-674 (June 29) 1945.
5. Rammelkamp, C. H., and Bradley, S. E.: Excretion of Penicillin in Man, Proc. Soc. Exper. Biol. & Med. 50:30-32 (May) 1943.
6. Randall, W. A.; Price, C. W., and Welch, H.: Estimation of Penicillin in Body Fluids, Science 101:365-366 (April 6) 1945.
7. Schmidt, W. H., and Moyer, A. J.: Penicillin; Methods of Assay, J. Bact. 47:199-209 (Feb.) 1944.

TREATMENT OF THE MINIMAL LESION

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Because of the vast x-ray program organized and conducted by the Medical Departments of our armed forces and the United States Public Health Service in industry and, sporadically, in many of our schools, colleges, and communities, the problem of the minimal lesion becomes more and more important. In a discussion of the treatment of the minimal lesion, we feel it important to consider the primary lesion first.

THE PRIMARY LESION

In considering the primary lesion, it is well to remember that such lesions are not confined to infants and children. Primary tuberculosis occurs in adolescents and in adults. With a decline of the tuberculosis death rate during the past forty years, it is to be expected that a large number of individuals did escape primary infection during childhood and that primary tuberculosis will become more common in adolescents and in adults.

We know that practically all student nurses who are non-reactive to tuberculin become reactors by the end of their training courses. Recent studies of college students in this country and young adults abroad reveal that practically 80 per cent of men of military age are non-reactive. With these facts in mind and with the eventual advent of universal x-ray study, we will discover more and more adult and adolescent cases during the active stage of primary infection. Owing to the mildness of the symptoms and signs, many cases are overlooked.

The chief symptoms are slight fever, loss of appetite, and, in children, the failure to gain weight. Local physical signs are usually absent unless there is a pleural effusion complicating the process. There may be little or no cough, and seldom does the patient raise sputum. However, careful examination of the gastric contents more often than not will reveal tubercle bacilli. There is an increase in the sedimentation rate as well as an increase in the leukocyte count during the early active phase of primary infection. Both gradually recede to normal as the active phase passes.

In cases where pleural effusion occurs, a peripheral lymphatic infection or hematogenous seeding occurs, or there may be even the usual blood stream dissemination.

Erythema nodosum frequently follows tuberculous sensitization. Walgreen found that 95 per cent of the children who developed erythema nodosum showed evidence of tuberculosis and demonstrated tubercle bacilli by gastric lavage in a high percentage of the cases.

The shadow of the primary lung infection in the active phase usually appears on the x-ray film as a pneumonic area. It may occur in any lobe and may be located near the periphery. It varies in size from a small barley-like opacity to one involving most of the lobe. The other component of the complex appears as a peri-hilar shadow, usually larger than that of the periphery shadow, and may extend to the opposite hilar region. Multiple primary foci occasionally occur. Following the active phase, the lung shadows gradually disappear in from six months to a year and shrink into a Gohn focus. They frequently disintegrate and disappear.

The aftermath of the primary infection is to leave the patient tuberculin sensitive and harboring a focus or foci of tuberculosis. The prognosis in an uncomplicated case is excellent unless the patient is left exposed to continuous infection.

Of paramount importance, therefore, is finding the source of infection and breaking the contact. In addition to this, rest is all that is usually needed.

In evaluating the clinical importance of

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primary infection, it is well to remember a pertinent statement by Dr. James Alexander Miller, who says, "tuberculosis is a systemic disease—first, primary infection; second, the disseminating phase; and third, the tertiary phase—affecting various organs."

The means at our disposal for the diagnosis of primary infection are reliable and simple and will, of course, eventually be universally utilized. It is a well-established truth that a great majority of cases of adult tuberculosis have their origin in a primary infection.

It seems reasonable to believe that a more serious appraisal of a primary infection with the proper observation and treatment when necessary would greatly diminish the number of re-infection adult types or at least render the early diagnosis at the onset of infection much easier.

THE MINIMAL LESION OF SECONDARY INFECTION

The minimal lesion of secondary infection or adult type tuberculosis will demand more and more of our attention as mass x-ray surveys proceed and multiply.

What are we to consider as a minimal lesion? The limits of the minimal lesion have been variously described. The United States Veterans Bureau, in its manual for medical examiners, describes a minimal lesion as "a slight lesion limited to a small part of one or both lungs." Mobilization Regulations, War Department, April 11, 1944, states in Section 13, paragraph 59, "A small infiltrative tuberculous lesion, unless of sharply defined linear or nodular appearance on the x-ray film, is disqualifying even though involving a total area of less than five square centimeters and apparently stable over a period of six months."

These regulations do not designate five square centimeters as the limits of a minimal lesion in so many words, but it may be inferred that the authors of these regulations do believe that an area of five square centimeters is the limitation of a minimal lesion, even though apparently healed for six months, so far as the armed forces are concerned.

In 1941 a survey was conducted by the Council on Military Affairs and Public Health of the American College of Chest Physicians. In this survey, 100 chest specialists and 100 roentgenologists sent in their descriptions of a minimal lesion with the following results: sixty-five per cent of the roentgenologists described a minimal lesion as one not involving more than a volume of one lung above the second rib and third dorsal spine, with no softening and no cavity, although there may be fibrosis. Ninety per cent of the chest specialists considered a lesion minimal provided it did not involve more than the volume of one lung above the second rib and third dorsal spine, with no softening or cavity and with or without calcific deposits.

My own personal opinion is that we should consider an active lesion minimal only when the shadow cast is soft anywhere in the lung or lungs, with or without calcific deposits in the immediate vicinity. The soft shadows can be numerous and in either lung, and each can be considered a minimal lesion. It seems to me that when one or more of these soft shadows occupy an area of more than five square centimeters, we can no longer consider them minimal lesions. It goes without saying, however, that great numbers of minimal lesions occurring in a given case would be more serious than one or two such lesions.

Until recently tuberculosis was seldom diagnosed until the symptoms developed. Now, with our modern methods of case finding, our opportunities for discovering early adult tuberculosis in the minimal stage are greatly enhanced. Since we will be seeing more and more of these minimal-stage cases, it is highly important that a plan of procedure be outlined.

Our first duty, once we discover a minimal lesion, is to determine its clinical status and whether treatment is needed in a particular case. For all practical purposes, we can classify cases presenting minimal lesions into two main groups, symptomatic and asymptomatic. It is obvious that treatment should be begun at once in a symptomatic case. In the asymptomatic case, a period of observation and study is decidedly indicated because the majority of cases with minimal lesions do not have symptoms.

The seriousness of minimal lesions has been demonstrated by many observers by the fact that progression occurs in more than one-third of the patients.

Cecil divides cases with minimal lesions into four groups: first, those which obviously need treatment; second, those which obviously do not need treatment; third, those which are of uncertain status and should be observed while the patients continue their usual activities; fourth, those in which the status is so uncertain that observation should be carried out with complete bed rest. Falling in this fourth group would be the adolescent or the young adult in his early 20's, showing a minimal lesion which on the x-ray film casts a soft, poorly circumscribed shadow. Such lesions are usually of recent origin, unstable, and potentially dangerous. The absence of symptoms is no sign that treatment should not be instituted. Somewhat greater latitude may be allowed older patients, provided frequent x-ray studies are carried on.

Briefly, the following is a suggested pro-

cedure for diagnosis, management, and treatment of a minimal tuberculosis lesion of the lung:

Diagnosis. (1) History: A complete and detailed history is of the utmost importance in first arriving at a definite diagnosis as well as to aid in the evaluation of the patient in the outlining of his treatment. I will not repeat those things we all know that should be inquired into in taking the history. I will emphasize, however, the importance of social background, the mental capacities of the patient, the economic status, the opportunities for exposure to infection, the habits, and the occupation of the patient. It is wise to inquire into the life of the patient as to whether there may be personality conflicts, mixed personality, or a definite psychoneurosis at the outset.

The x-ray study for complete diagnosis should be made on 14 x 17 films and should be stereoscopic. If symptoms of tuberculosis are present and the stereoscopic films are negative or inconclusive, lateral and oblique films should be made. Many times small infiltrates will be revealed in lateral and oblique films that are completely hidden in the anteroposterior view.

There are other shadows to be found in x-ray films that must be differentiated from a minimal tuberculous lesion, such as the shadows cast by fungus infection, certain types of atypical pneumonia, simple bronchopneumonia, early lung abcesses, early neoplasms, pulmonary lesions secondary to heart disease, early silicosis, Loefller's syndrome, and so forth.

Physical examination in a case of early minimal tuberculosis reveals little unless the lesion is in the periphery, where one may, on rare occasions, find persistent rales in a very small area.

Symptoms. Malaise, lassitude and fatigue are the definite suggestive symptoms. There may or may not be cough. Pain, if present, is usually due to pleurisy. The symptoms depend on the degree of toxicity. The patient may become irritable, impatient, and more often than not show signs of selfishness, ungratefulness, and, quite often, egotism. Many cases may have mixed personalities. These things are important for us to discover if we are to control and guide many of these patients. Blood raising is an early symptom in many cases. Fever, loss of weight, and, in the young, failure to gain weight are other symptoms.

Laboratory Procedures.—Sputum examination should be done if sputum is present. Otherwise, the gastric contents should be examined, especially in all doubtful cases. Urine examination is seldom of value as a diagnostic aid but, of course, should be a routine procedure. Blood examination is of utmost importance. It is within the field of subclinical toxemia that blood studies may be of value as indicating directly the progression or regression of the toxemia and, consequently, the effectiveness of various forms of therapy in controlling the general reaction to the focal disease. The complete blood count may be normal in the early phase of an active minimal lesion. There is some evidence now that blood examinations after tuberculin injection in infected individuals who show no clinical or hematological abnormalities may be of value in demonstrating subclinical activity in a tuberculous focus. There is usually a leukocytosis to a small degree. In all cases with toxemia, the Schilling hemogram may reveal a shift to the left. The sedimentation rate is usually increased, especially when there is a progression of the lesion. The complement fixation test may be of some help: It must be remembered, however, that the test is often positive in arrested cases and even in a few of those who have never had tuberculosis. The prothrombin estimation is very important. Since we have tests for measuring vitamin A and ascorbic acid and since it has been proved that the values of these two vitamins are greatly reduced in tuberculous individuals, these tests should also be made.

After a positive diagnosis is established in a case with symptoms, treatment must be instituted at once. This requires planning, and all factors of the case must be taken into consideration. The chief principle of treatment is rest in a symptomatic case as well as in those patients without symptoms but who do have x-ray evidence of a recently developed lesion or a lesion of instability, either proved or inferred. The place of treatment must be decided upon. The patient, especially if young, should be sent to a hospital or sanatorium. The trend now for this type of patient is away from the sanatorium, especially if the case is in the non-productive stage. The tendency now is to provide tuberculosis departments in our general hospitals for these minimal lesion patients and to isolate the productive open case in the sanatorium. Doubtful cases under observation should be sent to the tuberculosis department of a general hospital. Whether a hospital or a sanatorium is the most feasible at the moment, the person should be sent to one or the other, where strict rest can be carried out. To think of rest only in its relation to the reduction of the respiratory rate is a mistake. Experience has shown all of us that rest promotes resistance and contributes to the phy-

siologic tone which is so necessary for recovery.

Diet and Nutrition.—While diet has always occupied a prominent place in the treatment of tuberculosis, attention is being directed more than ever to diet because of a more scientific approach to the subject. Plenty of good food has always been advised, but well-fed patients do not necessarily mean well-nourished patients. Recent studies emphasize the greater need of protein, fat, vitamins, and minerals. These studies have proved that there is a definite deficiency in vitamins A, C, and K in the average tuberculous individual. It is also believed that since there is a proved deficiency in these vitamins that there may be a deficiency in all other vitamins. The three minerals deemed the most important are calcium, phosphorus and iron. The ideal diet, as revealed by these studies, would, therefore, contain for the average adult a minimum of 80 Gm. of protein and 150 Gm. of fat per day, employing the essential foods containing these items. In addition, all vitamins and the minerals mentioned should be added.

Observation.—Systematic observation of the patient is very important. Simple clinical records must be kept, supplemented by periodical x-ray study, in some cases every two weeks, and blood studies. If at any time one is convinced after a period of observation that a lesion is progressing, as shown by the x-ray, the blood studies, and the symptoms, then and only then should some form of collapse therapy be instituted.

It is not good practice nor the exercising of good judgment to proceed immediately to the use of some form of collapse therapy in the minimal lesion case at the outset.

Now let us consider the class of cases which at the time of examination have apparently healed lesions, even minimal or larger, and which are obviously not in need of treatment. Constitutional symptoms observed clinically are gross symptoms, leaving little doubt of their interpretation. But often there are no constitutional symptoms, and reliance on clinical signs such as fever, increased pulse rate, and loss of weight, and on various subjective symptoms, is inadequate. Thoughtful phthisiologists throughout the world have recognized this and are attempting to determine whether the lesions discovered by roentgenogram are clinically active, potentially active, or truly latent and therefore innocuous. As has been pointed out, many of the potential pulmonary lesions discovered by roentgenogram are latent and will remain so under ordinary conditions of life, and it is both unnecessary and unjust to submit such individuals to the long treatment indicated for active tuberculosis. As time goes on many more of this type of patient will come to us as a result of mass x-ray studies. In order to intelligently advise such a patient, we will have to become job analysts. We must be able to evaluate his physical capacity and advise the patient accordingly. He must be advised how to live as well as to the type of work he can safely perform. He should be advised to work in dust-free air and not change jobs without consulting his physician. He should be advised as to what untoward symptoms he may expect and to immediately report to his physician should they develop. It is the physician's duty to encourage this type of case to carry on in some vocation.

Prognosis. Because of the multiplicity of factors, prognosis is difficult. In a young adult with a minimal lesion, who in spite of rest, proper diet, and good care, reacts with a prolonged fever and poor physiologic response, the prognosis is not good even after collapse therapy has been instituted. Young boys, young girls, and more especially young negroes fall into this class.

On the other hand, in a robust type of person with well-maintained vascular tone and a good physiologic response, both of which are strong features of good resistance, the prognosis is good. Age, sex, color, and the patient's reaction to tuberculous infection, plus the emotional, the personality, and the socio-economic background are the important factors controlling the prognosis regardless of the size of the lesion.

In conclusion, I feel we must also remember that tuberculosis is a dynamic process and runs a varied course and that early diagnosis of a minimal lesion and the institution of definitive treatment offers the only hope for the further reduction of the death rate in this disease.

As time goes on, we chest specialists will be confronted more and more with the problem of diagnosis, management, and treatment of the primary as well as the minimal lesion of secondary infection.

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Tuberculosis still ranks as our seventh or eighth cause of death. The major problem which confronts us, in this case, is early diagnosis; but this term no longer means the diagnosis of clinical disease by fever and a cough and loss of weight. It means diagnosis before clinical disease occurs at all—diagnosis through the magic of the x-ray. In many individuals, tuberculosis can be arrested even after clinical symptoms have appeared. In other instances, it is by that time too late. The keystone of our program must be the discovery of early lesions in the lung at a time when the keenest diagnostician with his stethoscope can observe no clinical abnormality.—C. E. A. Winslow, Survey Graphic, April, 1945.

RECENT ADVANCES IN THE STUDY OF PERTUSSIS

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That whooping cough is one of the important current pediatric problems is generally admitted. The high mortality which the disease exacts, particularly among young infants, and the seriousness of the pulmonary and cerebral sequelae require little emphasis. In spite of the general decline in mortality during the past few decades, it is fair to state that the case fatality rate among hospitalized patients under 6 months of age probably remains between 10 and 35 per cent. The general case fatality rate has been found to be distinctly lower (2.3 per cent), particularly where studies of surveyed areas have been made (0.36 per cent). Of the 10,730 deaths recorded throughout the United States (1938 to 1940 inclusive), 47 per cent occurred during the first 7 months of life.[11] In New York State, pertussis accounts for about 6 per cent of the infant mortality rate.

Epidemiologically, the disease presents some interesting features. Since the original description by De Baillou in 1578, the distribution of the disease has been found to be rather general throughout the world. Though distinctly a respiratory tract infection, it often presents an incidence curve similar to that of the well known intestinal tract diseases. In certain age groups it is statistically more frequent among the female sex. The communicability rate is high; resembling that of measles and of varicella. In family exposures this ranges between 80 and 90 per cent; while in schoolroom exposures, at least 50 per cent of the susceptibles have been observed to develop the disease. A recent study by Dauer[4] indicated that the highest death rate is found in rural, rather than in urban populations, and that it is directly related to poor living conditions, poverty, crowding, and inadequate professional care. Because of the pre-existing downward trend of the mortality curve, Dauer found it difficult to credit this effect directly to the current practice of active immunization.

A review of the investigative work on pertussis indicated clearly that a substantial advance has been made during the last ten to twelve years. Much of this work has naturally been stimulated by previously important contributions such as those of Bordet, Gengou, Mallory, Madsen, Sauer, Lawson, Smith, and others. It seems to me that the impetus to the current interest came largely from the demonstration by Leslie and Gardner[8] (1931) that only phase I organisms, of proved antigenic potency, should be used for the preparation of vaccine. The practical application of this contribution was popularized by Madsen, Sauer, Miller, and others.

A second impetus originated in the threat of certain investigators[10] to incriminate a filterable virus as a dual-etiological agent. For instance, investigation of this possibility by Rich, Holt, Shibley, the MacDonalds, and others led ultimately to the demonstration that the experimental disease could unquestionably be reproduced in the chimpanzee and in the human being by inoculation with Hemophilus pertussis alone. It was found that the role of a filterable virus was not required for this purpose. The disease was also produced experimentally in the monkey, ferret, puppy, rat, and mouse. The discovery that a standard type of experimental infection could be produced in the mouse has been particularly important because it affords a useful method by which one may study certain immunological problems and test various therapeutic and preventive agents.

Though some type of blood-agar-potato mixture (Bordet) has long been used successfully as a culture medium, new variations and modifications of this medium have been made, some of which are distinct improvements for specific purposes. It has been demonstrated by Hornibrook[6] that H. pertussis can be grown in a semi-synthetic liquid medium. This type of medium is useful in the study of the antigenic structure of the organism and in the production of vaccine. Certain enrichments of the classical solid medium, such as beef liver extract, developed by McLeod, provide a more rapid and luxuriant growth of the organism.

Cultural methods are also important from the standpoint of the laboratory diagnosis of whooping cough, which seems to be an increasingly important practical problem. The typical case of pertussis offers little diagnostic difficulty, but the widespread use of vaccine results in a growing number of modified cases, rather than in complete protection. These mild cases often constitute diagnostic difficulties, and they also represent important epidemiological problems. Moreover, other diseases of the respiratory tract—infections of the postnasal region, enlargement of peritracheal lymph nodes, allergic bronchitis, parapertussis, and even in-

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fection with Brucella bronchiseptica and with Brucella abortus, have been confused clinically with pertussis. During the past few years my attention has been attracted to the marked similarity which sometimes exists between the cough of the so-called "atypical" pneumonia and that of whooping cough. Experienced physicians have come to realize that every patient who whoops does not have whooping cough, and conversely, that whooping cough may exist without the whoop. For this reason the name "pertussis" is preferred by some to that of "whooping cough."

Since 1916 the cough-plate method of Chievitz and Meyer has been used, by some routinely, for the isolation of the causative organism. Because of certain difficulties encountered with this method, we introduced the nasal-swab method in 1940. In our hands as well as in the hands of others, this method represents a distinct improvement over the cough-plate method, especially in infants.

Some workers have advocated the use of agglutination and complement-fixation tests to measure the level of humoral immunity, while others believe that the mouse-protective test is superior. No doubt the reader has often hoped that a simple skin test, similar to the Schick reaction, would be made available for this purpose. Considerable effort has been directed to this end. Two materials that have resulted from recent studies on the antigenic structure of H. pertussis are the agglutinogen and the heat-labile toxin. In the hands of certain investigators, particularly Flosdorf[5] and Strean,[13] these substances, when used as skin-testing materials, have given interesting, if not promising results. It is interesting that the agglutinogen gives a positive reaction when immunity is present, while the toxin, like the Schick test, is positive when susceptibility exists.

From the practical point of view the real problem which confronts the clinician concerns the protection of the infant under 6 months of age. We have, in active immunization, a reasonably effective method of protection to be employed at, or beyond the sixth month of age. Recently Sako and his associates[11] have demonstrated how this method may be successfully used at a much earlier period of life.

Since 1935 my associates and I[1] have been interested in applying methods of passive protection to the very young infant who is either exposed or who is in the early period of the disease. It was observed that convalescent and adult immune serum had occasionally been used for this purpose. One of the early reports came from Texas when Brown[2] (1934) reported successful results following the injection of adult immune serum. Kendrick,[7] in 1936, introduced hyperimmune human serum. This work was actively extended by McGuinness and his associates, and its superiority over ordinary convalescent serum soon became apparent. Laboratory tests revealed the high protective value of hyperimmune serum against the experimental disease in mice. When this serum is injected into an infant during the catarrhal period of whooping cough, mouse-protective and opsonocytophagic values of the infant's serum comparable to those existing during convalescence are regularly observed. This type of serum has proved effective in the prevention and modification of the disease.

In 1939[12] it seemed practical to attempt the production of an immune rabbit serum. This was originally prepared by injecting rabbits with suspensions of living, freshly isolated H. pertussis. The antiserum, which resulted, possessed high agglutinin and mouse-protective titers but very little antitoxin. The globulin fraction prepared from this antiserum contained practically all of the antibody of the original serum, and when restored to the original volume, was equally as protective as was the original antiserum. This antibacterial serum and a similar one prepared by Silverthorne and Brown have proved to be definitely effective in preventing the disease in exposed infants. Two other interesting types of antisera have since been introduced: an antitoxin prepared by injecting rabbits with the toxic material obtained from the organism, and a combined antibacterial and antitoxic serum prepared by injecting the animal with both organism and its toxin. The antitoxin in high dilution neutralized the toxin, possessed a low agglutinative titer, but protected mice against the experimental disease resulting from either the intranasal or intra-abdominal route of inoculation. The observations of Dr. Katsampes, in our laboratory, indicate that the antitoxin also inhibits the development of hyperlymphocytosis, which characterizes both the murine and human type of infection. Studies now in progress suggest that certain fractions prepared from hyperimmune human serum and whole blood plasma are also highly protective.

The possibility of establishing passive immunity in the new-born infant by actively immunizing the mother during the third trimester of pregnancy has received attention. In our clinic, Dr. Lichty and Mrs. Slavin[9] showed that the transplacental transfer of human antibodies, produced by this method,

occurred to a significant degree, particularly when the immunized mother gave a history of past infection with H. pertussis. Scadron and Cohen[3] later confirmed these observations, with even better results, by injecting the pregnant mother with larger doses of vaccine. Obviously there are practical objections to this method of immunization, solution of which seems less urgent now that effective methods of passive and active protection may be directly applied.

SUMMARY

In summary, certain general statements may be made concerning the problem as follows: In spite of the natural falling death rate from pertussis, it still constitutes a public health problem, particularly during infancy.

Satisfactory active immunization may be accomplished by the injection of adequate doses of vaccine.

Subsequent stimulating injections are desirable.

Passive protection can be conferred by the injection of convalescent serum, hyperimmune human serum, or immune rabbit serum, either antibacterial or antitoxic.

When failure to protect completely by either method results, modification of the disease may be expected, a very desirable objective not generally appreciated.

Health officials should give thought to the idea of making available agents for active and passive protection and for bacteriological diagnosis.

Among the problems confronting clinical and immunological investigators, certain ones appear particularly inviting: improvement of culture methods, improvement of the antigen, the proper spacing of injections, the possibility of active immunization at an earlier age, and finally more fundamental studies to assess the relative importance of humoral and cellular, and of antibacterial and antitoxic immunity. In addition, the scope of scientific interest would not be adequate if it failed to include further studies of chemotherapy and of antibiotics.

REFERENCES

1. Bradford, W. L.: Use of Convalescent Blood in Whooping Cough, with a Review of Literature, Am. J. Dis. Child. 50: 918-928 (Oct.) 1935.

2. Brown, W. D.: Use of Adult Whole Blood in Whooping Cough, Texas State J. Med. 30:216-218 (July) 1934.

3. Cohen, P., and Scadron, S. J.: The Placental Transmission of Protective Antibodies against Whooping Cough by Inoculation of the Pregnant Mother, J. A. M. A. 121:656-662 (Feb. 27) 1943.

4. Dauer, C. C.: Reported Whooping Cough Morbidity and Mortality in the United States, Pub. Health Rep. 58:661-676 (April 23) 1943.

5. Felton, H. M., and Flosdorf, E. W.: Clinical Results with the Use of Agglutinogen from Phase I Hemophilus Pertussis as a Skin Test for Susceptibility to Whooping Cough, J. Pediat. 22: 259-264 (March) 1943.

6. Hornibrook, J. W.: Cultivation of Phase I H. Pertussis in a Semisynthetic Liquid Medium, Pub. Health Rep. 54:1847-1851 (Oct. 13) 1939.

7. Kendrick, P.: A Note on the Use of Reinforced Convalescent or Hyperimmune Serum for Passive Immunization of Infants Exposed to Pertussis, J. Pediat. 9:118-120 (July) 1936.

8. Leslie, P. H., and Gardner, A. D.: The Phases of Haemophilus Pertussis, J. Hygiene 31:423-434 (July) 1931.

9. Lichty, J. A., Jr., Slavin, B., and Bradford, W. L.: An Attempt to Increase Resistance to Pertussis in Newborn Infants by Immunizing their Mothers during Pregnancy, J. Clin. Investigation 17:613-621 (Sept.) 1938.

10. McCordock, H. A., and Smith, M. G.: Intranuclear Inclusions, Am. J. Dis. Child. 47:771-779 (April) 1934.

11. Sako, W., Treuting, W. L., Witt, D. B., and Nichamin, S. J.: Early Immunization against Pertussis with Alum Precipitated Vaccine, J. A. M. A. 127:379-384 (Feb. 17) 1945.

12. Scherp, H. W., Bradford, W. L., and Wold, M.: Protective Value of Immune Rabbit Serum and its Globulin Fraction against Experimental Murine Infection with Hemophilus Pertussis, Proc. Soc. Exper. Biol. & Med. 42:172-176 (Oct.) 1939.

13. Stream, L. P.: Skin Test for Susceptibility to Pertussis, Canad. M. A. J. 42:525-528 (June) 1940.

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BRUCELLOSIS OR CHRONIC UNDULANT FEVER

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Some years ago, Dr. Charles Stone, of Galveston, Texas, wrote an article on undulant fever which was published in the TEXAS STATE JOURNAL OF MEDICINE, but that was before the chronic type had been recognized. Several other articles since then have been written on the subject, and I have had at least twenty-five letters from doctors, like Walter Simpson, of Dayton, Ohio, who have been treating the disease in the chronic form.

Dr. Ephraim Goldfain, of Oklahoma City, wrote me about ten years ago, asking if I had been noting cases of chronic brucellosis with rheumatic symptoms, as he had had about 28. Up to that time I had not been looking for those cases, but since then all my patients have had the skin and agglutination tests.

I have had more than 900 patients who had the clinical symptoms, and most of them responded with improvement to the treatment. The incidence is increasing all the time. Ten per cent of the tests were formerly positive, and now at least 20 per cent are positive.

I had one patient from Superior, Wisconsin. Another from near Cleveland said her cows aborted the calves so badly, that she had to sell them all. I had another patient from New York City, but very few cases are there because, as is true in most large cities, pasteurized milk is used.

Dr. Russell Cecil of New York, who gave a very good description in his latest book, "Medical Practice," of chronic brucellosis, wrote me three years ago that he had never treated but one patient with brucellosis, his own nurse, who reacted so violently to the vaccine that she would not take any more treatments.

I recently had a patient from Denver, Col-

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orado, and have had them from all over Texas, Oklahoma, Louisiana, California, and Oregon.

In this article I will give my own experiences because these cases are the ones I know about and have been able to follow up.

One patient from Mexico, whom I had treated for syphilis about eighteen years ago, came back, and was getting better decidedly, when all at once he became seriously ill with fever. He had a positive agglutination test, but there were no cases of brucellosis where he came from. He had stopped, however, in Laredo and stayed there four or five days. As he was a great milk drinker, I think he got the disease drinking milk in Laredo. He soon died in spite of the sulfa drug given.

Another patient from Olsen, Texas, came for some rectal trouble requiring an operation, which was performed. She had a negative skin test. After she was ready to leave the hospital, she suddenly developed a high fever, had a positive blood test, a distended abdomen, and much gas. In spite of the use of sulfa drugs, she died promptly. Her husband found that the milk which they had been obtaining from a neighbor, who had three children, all sick, was from a cow that had had three abortions!

I have been trying to get all patients interested enough in the subject to have their cows tested.

Several years ago, a patient from Cameron, Texas, was relieved of all symptoms by hot mineral baths and vaccine. She said that she was so tired, she would not even clean up her house. After treatment she found that she could do a great deal of work, and would move the furniture just for exercise. The cows from the dairy where she had gotten her milk were tested, and 12 out of 14 were found to have Bang's disease by an expert from Texas Agricultural and Mechanical College.

A few months ago, I succeeded in getting all the cows around Marlin tested thoroughly, and one dairy herd was found to have 73 positive Bang's disease tests, out of a herd of 186. We have no Bang's disease in our cattle now!

The disease is much more prevalent than we think it is, and the medical profession should be apprised of the fact.

In the May issue of *Coronet*, Lt. Comdr. Harris, M. C., cites the Montreal epidemic about ten years ago in which four thousand persons took the disease and four hundred died.

Brucellosis is conveyed by cream more than anything else, and by milk, butter, and cheese.

The following is the syndrome most patients have:

1. They are very tired, and wake up in the morning as if they had not slept at all, and yet they may have a normal blood count; however, they usually have a low polymorphonuclear count.

2. They are very nervous and frequently cannot sleep; yet they may get spells of being very sleepy and cannot do anything—not even read for a few hours. This is the "neurasthenic" group. Some of them cry, and have been through several clinics without finding out the cause of their trouble.

3. They have aching pains in the shoulders, and the neck frequently, and around the joints rather than in the joints themselves. They frequently have lumbar pains, and in fact, the pains may jump around and suddenly come and go all over their body.

4. These symptoms are undulating in type, and may get better for a few days and then decidedly worse. Patients, especially in acute cases, frequently have a perspiration with a peculiar odor like a rat's nest.

Most patients respond to treatment very rapidly by vaccine given intradermally, but others are very slow. Warm baths usually help them, and a cold climate also invigorates them and makes them feel better. In a few instances the vaccine goes right into the blood and gives a systemic reaction. The next dose must be reduced and not given until the reaction disappears.

DIAGNOSIS

The blood cultures are difficult and slow to make in the first place, and in the second place, they are often inaccurate in the old chronic cases because of the scarcity of the bacteria. Huddleston's opsonocytophagic test is not dependable, and is very difficult to do. Mr. Baker, who was in our laboratory for a year, and who was with Calder for two years, said the Huddleston test was mere guess work, he thought, and not dependable.

The diagnostic tests are the clinical symptoms—syndrome, as mentioned above, the skin test, and the agglutination test, easily done.

The mixed vaccine of Parke, Davis Company, Lederle Laboratories, or others are dependable, and if the patient has the disease, the doctor must know how to diagnose the skin reaction.

Those who work with animals having the disease are usually very sensitive, and they may have a decided reaction on their skin and yet no clinical symptoms, because they have been subjected to the bacteria so often they are immunized.

A skin reaction which persists ten days or two weeks and makes a little hard spot with a hole punched out in the middle, as if it might have pus in it, but does not, usually indicates that the vaccine dose was much too large. I habitually use a 1:1000 dilution of vaccine to start with—that is, one part of the vaccine to 999 parts of normal saline solution, with a little phenol as a preservative; the third dilution is the one we habitually use as our test. Then if it helps the symptoms, we use a stronger dose—the second

dilution, 1:100 and then 1:10 for treatment.

If the patient gets a quick reaction, which becomes as large as a quarter or dime with considerable inflammation, induration, and pigmentation, and fades away quickly, the patient has the disease and has good fighting power. That kind of a reaction always helps the patient.

I give the test vaccine intradermally always. The treatment is usually given intradermally until the patients have taken several doses. Then if they do not get a reaction, the needle is pushed in a little farther, and two or three drops more are given in the flesh.

Of all the doctors from whom I have had letters, only one was giving the vaccine intradermally. He got good results.

Huddleston reported 3 cases in which he got rid of all symptoms by the test, but did not choose that as a method of treatment.

The next vaccine is not given until the previous reaction has faded out. Sometimes it is four or five days, and if the patient still is feeling better, the treatment can be put off longer. The vaccine is repeated from four to five to seven times.

Most of my patients are treated beginning with the fourth dilution—one part of the vaccine to nine of normal saline, and then one part of that to nine, to the third dilution. A great many of them have to begin with the sixth dilution, and some of them are so sensitive that we have to begin with the tenth dilution, and then rapidly increase the dilution as the reaction fades out and the patient feels better.

The patient should have thiamine chloride, 60 mg., given intramuscularly once a day at the beginning.

I recently treated a family of five from Anson, Texas, four of whom had been previously treated for the disease. They had read about brucellosis and had had their doctor test them. The husband and wife had positive agglutination tests of 1:320; two children had 1:180. The other child tested negative. The mother and father had had thirty-two shots of vaccine in such large doses that they had a chill and fever each time. They were not benefited at all; in fact, they were made worse because their immunity was broken down. The children were benefited, because they never react to the vaccine as strongly as older persons do. They all, however, improved rapidly with small doses rapidly increased. The family went home with the vaccine to be continued.

Brucellosis is one of our greatest health problems, and doctors should be wise in the diagnosis of the disease. Every person who has the chronic symptoms of nervousness, aching, and tired feeling should be given the agglutination and skin test. The positive agglutination is present in only 48 per cent of those who have brucellosis, Alice Evans has shown.

I got the symptoms last fall, and became so tired, sleepy, blue, and "achy" about once a week, I could not read. I have a positive skin test and 1:20 agglutination test. My wife said it was old age, but the vaccine in small increasing doses has relieved me. Older doctors who read this and have the blues and a tired, "achy" feeling better be tested.

The trial treatment is the best test, giving the treatment as stated above, beginning with the sixth dilution intradermally, and then increasing it according to the reaction. When the reaction fades away entirely and the patient is free of all symptoms, then the patient can be pronounced cured. The patient should be rechecked if symptoms return.

Our state sanitary code should be amended so that it would carry the same restrictions and penalties for brucellosis in animals that it does for tuberculosis.

I am trying out a treatment of radioactive mineral salt, the germicidal type, which is to be given intravenously. What the results will be, I cannot tell yet. I am trying out a definite number of cases, and checking up on them carefully.

The nervous patients, so-called "neurasthenic" ones, who have been through many clinics without finding anything wrong or have had two or three operations, are the ones who are so grateful when their cases are diagnosed, and they are given the intradermal vaccine and the thiamine chloride with psychologic therapy and diet. They are the ones who usually recover rapidly if the sixth dilution is used as the starting dose.

CONCLUSIONS

Chronic brucellosis is widely prevalent all over the United States and in other countries. Many chronic invalids have been told that their troubles were in their minds, but when brucellosis was found to be the cause of their trouble and treatment promptly given in the right way, they became much better.

All cows, hogs, and goats should be tested for chronic brucellosis, and those showing a positive test should be eliminated from the herd or destroyed. Young animals should be vaccinated against the disease.

An amendment to our Sanitary Code pertaining to brucellosis, should be enacted and enforced for the benefit of the entire population, many of whom have this disease unknown to themselves.

PENICILLIN EFFECTIVE FOR GONORRHEA

Oral penicillin, administered in alkaline-coated capsules, 50,000 units every two hours for 10 doses, resulted in cure for 72 per cent of a group of 53 patients with acute gonorrhea in an experiment by five San Francisco physicians.—J. A. M. A., Oct. 6, 1945.

PLEURAL MESOTHELIOMA

WITH REPORT OF A CASE PRESENTING SOME UNUSUAL ASPECTS

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Most malignant mesotheliomas arise from the pleura. Although meningeal mesotheliomas occur about four times as often, they are nearly always benign. Pleural mesotheliomas are, nevertheless, quite uncommon, the autospy incidence having been estimated at from .02 to .2 per cent. These tumors have excited considerable interest because of their rarity, the difficulty in diagnosis, and the diverse opinions regarding their origin.

Two types of mesotheliomas are recognized: the localized and the diffuse. The latter usually appears as multiple nodules or flat elevations over one or both pleural surfaces. These nodules increase in size so that the entire surface may be covered. A serous or serosanguineous exudate, which may appear to be completely sanguineous, commonly accompanies the growth. The tumor may invade the lung. Metastases to the bronchial, axillary, mediastinal, and cervical lymph nodes, and to the liver and spleen are the most common, but they have also been described in the brain, kidney, adrenals, bones, and thyroid. Widespread metastasis to distant organs is unusual.

The microscopic appearance is usually a diffuse proliferation of fibroblast-like and epithelial-like cells. The tumor may be divided into lobules by dense strands of fibrous tissue, enclosing clusters of epithelial cells. The cells are most often of moderate size, polyhedral or flat, with hyperchromatic nuclei and faint nucleoli. In some instances they are round or elongated. Although there is some tendency to form alveoli, evidences of secretion are usually missing.

The onset of the illness is usually gradual, beginning with pleural pain followed by cough and progressively increasing dyspnea. The duration is said to vary from three months to four years, the disease invariably terminating fatally.

The tumor may be suspected from certain clinical aspects. Pleural pain ordinarily occurs early in pleural tumors, late in pulmonary neoplasms. Approximately two-thirds of bloody pleural effusions are caused by malignant neoplasms, and the failure of thoracentesis to relieve the dyspnea suggests pleural mesothelioma. Tumor cells may be discovered in the fluid in about half of the sanguineous effusions resulting from malignancies, but the cells that sometimes occur in effusions not due to neoplasms may be mistaken for malignant cells. Clumps of cells with mitotic figures are not reliable criteria since non-malignant mesothelial cells can grow and multiply in such fluids. The absence of organisms in the fluid is significant. Roentgenograms of the chest are of little value unless air has been substituted for the fluid in order to outline the tumor. The resistance encountered in introducing a needle into the thoracic cavity is of some diagnostic import.

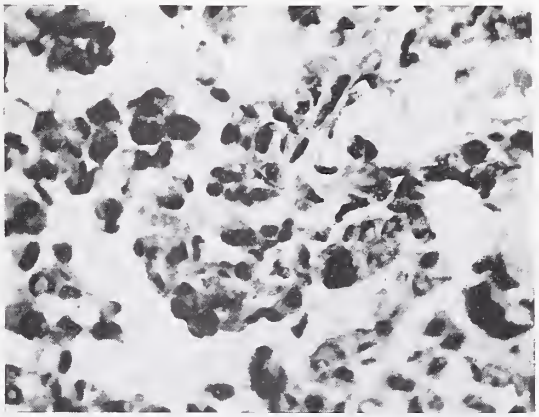

FIG. 1. Photomicrograph of section of sediment from pleural fluid, 4 mm. objective.

Almost from the time of Wagner's account in 1870 of the first adequately described primary pleural neoplasm, there has been discussion concerning the origin of such tumors. Some authors went so far as to deny their existence, saying that they are metastases from unobserved primary growths. It is, however, unlikely that all of the reported cases represent such mistakes. Few persons now deny the existence of primary pleural malignant tumors.

Other investigators suggested that the tumors originate from epithelial remnants left in the pleura during embryonic life or pinched off during cicatrization. This hypothesis has been generally discarded.

The belief that these tumors arose from the endothelium of the pleural lymph vessels was once widely accepted and was responsible for much dispute over nomenclature. The adherents of this theory considered the name "pleural endothelioma" to be the most appropriate, and a large part of the literature on the subject appears under that title. During the past twenty-five years this idea has had little support.

The most favored hypothesis ascribes the origin of most diffuse primary malignant tumors of the pleura to the pleural mesothelial cells. The ability of these cells to

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form connective tissue elements is not surprising in view of their origin from the splanchnic and somatic mesoderm. Maximow has demonstrated that the covering cells of the serosal surfaces can form cells of fibroblastic appearance and collagen fibers. Young has shown that the pleural serosal cells of a rabbit can undergo extensive hyperplastic and metaplastic proliferative changes, forming gland-like spaces lined by swollen epithe-

FIG. 2. Drawing of the left lung, showing multiple nodules on pleura and tumor in interlobar fissure.

lial-like cells. Stout and Murray found that both normal mesothelium and localized mesothelioma produced, in tissue culture, polygonal cells with large, oval, clear nuclei. Groups of atypical mesothelial cells have been seen separating from the fibrous trabeculae and invading the surrounding matrix of the tumor. Similarity in appearance is not proof of common origin or of actual transformation of one cell type into another, but in view of the work of Maximow, Young, and Stout and Murray, the most reasonable belief is that these tumors are mesothelial in origin. The wide morphological variations which have been the source of so many disputes are satisfactorily explained, and no further reason remains for doubting this origin in the light of the evidence available. The name mesothelioma is now in almost universal use.

A case of pleural mesothelioma which was recently seen at the Jefferson Davis Hospital is presented.

CASE REPORT

A white man, aged 60 years, entered the hospital complaining of pain in the abdomen and dyspnea. He had considered himself well until ten days previously, when he began to have an intermittent cramping pain about four centimeters below the umbilicus, radiating to both flanks, associated with constipation. He also noted dyspnea, slight at first, but progressively increasing, so that for the last four days before coming to the hospital he had orthopnea and on several occasions nocturnal dyspnea. A productive cough was present throughout the illness. He denied pain in the chest, but

FIG. 3. Dorsal view of a part of the anterior thoracic wall, showing sharp line of demarcation of tumor at pleural limit.

had had vague pains in both shoulders. There were no other subjective manifestations.

Physical examination revealed a well developed, well nourished, white male sitting up in bed. Respirations were 20 per minute and labored. The trachea was deviated to the right. The thorax was symmetrical, but the left costal margin moved less than the right with respiration, and pulled in on inspiration. The entire left hemithorax was dull to precussion, and Grocco's triangle was present on the right. The right hemithorax presented no other abnormal findings. Vocal fremitus, breath sounds, and voice sounds were greatly diminished on the left.

The heart was displaced about two centimeters to the right. The blood pressure was 125/70 in each arm.

The liver edge was palpable four centimeters below the costal margin in the right mid-clavicular line. No other significant physical findings were noted.

On the second hospital day a roentgenogram of the chest revealed complete opacity of the left lung field and shift of the mediastinum to the right. On the same day 50 cc. of straw-colored translucent fluid was removed from the left pleural cavity. This fluid contained clumps of irregular round to polygonal cells with large hyperchromatic nuclei. A few atypical mitotic figures were seen. Culture of this fluid revealed no organisms. On the fourth hospital day 850 cc. of grossly bloody fluid was removed. There was only slight relief of the dyspnea following removal of 1,000 cc. of grossly bloody fluid from the chest on the sixth, twelfth, and eighteenth days, respectively. On each occasion the same type cells were found (Fig. 1). Another roentgenogram obtained after replacement of the fluid by air showed complete opacity of the left lung field with increased density of the left side of the mediastinum. Ten sputum specimens were cultured, and on six occasions fungi compatible with monilia were found. The blood count revealed no significant abnormality. The sedimentation rate was 25 mm. in 60 minutes.

The patient's temperature rose on the third and fourth hospital days to 100.8 F. and 101.6 F., respectively, and on the twelfth day to 100 F., but at all other times varied between 98 F. and 99 F., sometimes dropping to 97 F. in the early morning. His clinical course was steadily downhill, respiratory distress gradually increasing until the twenty-first hospital day when he died, apparently of respiratory embarrassment.

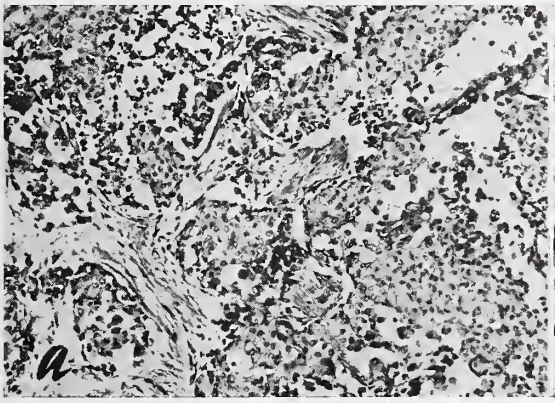

FIG. 4 *a*. Photomicrograph of a section from pleural neoplasm, 16 mm. objective.

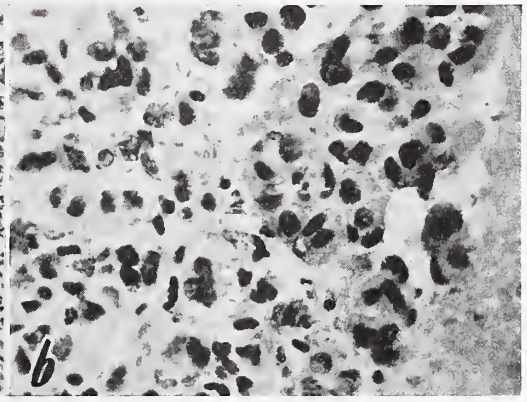

FIG. 4 *b*. Photomicrograph of a section from the pleural neoplasm, showing similarity to the sediment from the pleural fluid, shown in figure 1.

NECROPSY REPORT

Pleural Cavities.—The left pleural cavity contains over a quart of hemorrhagic fluid under pressure. The parietal and visceral pleurae are studded with nodules varying from 0.2 to 2.0 centimeters in diameter. The nodules over the visceral pleura are distinctly smaller than the ones on the parietal layer, none being larger than 0.5 centimeters in diameter (Fig. 2). These lesions are very closely placed, completely covering the parietal pleura (Fig. 3). They are light gray, moderately firm and friable, and sectioning reveals a light gray finely granular surface. The right pleural cavity presents no abnormality.

Mediastinum.—There is considerable shift to the right. The mediastinum adjacent to the left pleural cavity, especially the upper anterior portion, is indurated and presents nodular lesions similar to the ones described under pleura, the largest being 2.5 centimeters in diameter. Sections through these nodules reveal adipose tissue in the center surrounded by firm, friable, light gray tumor tissue.

Lungs.—The right lung presents no pathological change. The left lung is completely collapsed, being of non-crepitant meaty consistency. The interlobar septum is markedly thickened, firm, and friable, forming a tumor 6 by 3 by 0.6 cm. in size, from which the lung tissue is easily separated. Cutting of the mass reveals a light gray surface. The bronchi contain a moderate amount of mucus. The bronchial mucosa is reddish gray, of normal thickness.

Lymphatics.—The left hilar nodes are enlarged, discrete, moderately firm and friable, and on sectioning show a mottled light gray and black surface. The lower para-aortic group of lymph nodes presents enlargement of individual nodes which are discrete, firm, friable, and have a light gray finely granular cut surface. No other enlarged lymph nodes are found.

Lungs.—Sections from the left lung show the tumor to be confined to the pleura. The tumor cells vary from medium size round to large polygonal and medium size columnar, and are arranged in nests and broad sheets within a connective tissue stroma (Fig. 4*a*). The stroma varies in amount and density and shows areas of hyalinization. In places gelatinous degeneration of both tumor cells and stroma is seen. Most of the tumor cells have acidophilic cytoplasm and large hyperchromatic nuclei. Mitotic activity is not prominent, but a few bizarre mitotic figures are seen. In a few places tumor cells are seen within thin walled vessels. The lung is not invaded but is compressed and in most places completely atelectatic.

Sections from the parietal pleura show essentially the same type of tumor, with a greater tendency of the cells to form alveoli. The intercostal muscle is not invaded.

Sections from the mediastinum show adipose tissue encased in tumor tissue.

Lymph Nodes.—Sections from left hilar and para-aortic lymph nodes show metastatic lesions similar to the tumor described above.

The gastro-intestinal system, larynx, heart, pericardium, peritoneum, liver, gall bladder, bile ducts, spleen, pancreas, kidneys, bladder, testes, prostate, and bones were carefully examined grossly and microscopically for evidence of primary or metastatic neoplasm. None was found.

I feel no hesitancy in diagnosing this as a pleural mesothelioma. The gross and microscopic appearances conform to the descriptions available, and all other organs except the central nervous system were carefully examined to eliminate the possibility of this

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being a metastasis. The tumor was confined to the pleura on one side, stopping abruptly at the pleural reflection (Fig. 3). No metastases other than those to the lymph nodes were found, and the lung was not invaded. The tumor occupying the interlobar fissure was clearly confined to the pleura.

One of the most interesting features of this case was the duration of the illness. The patient considered himself to be well ten days before admission but despite supportive therapy died on the twenty-first hospital day—a total of only thirty-one days. I am not familiar with any report of a case of proven pleural mesothelioma having so short a clinical course.

It is notable that this patient gave no history of pleural pain. Since the early occurrence of such pain is said to be a valuable differential feature, it is unfortunate that it does not manifest itself with more constancy. The disease is rare enough that some such distinguishing characteristic is needed to call it to the mind of the examiner.

Roentgenograms made following artificial pneumothorax are perhaps more valuable in the diagnosis of localized than of diffuse pleural neoplasms. This procedure has become almost routine with the author in the presence of bloody pleural effusions of undetermined etiology and has very often been the source of much needed information.

The cells found in the pleural fluid were similar to those of the tumor (Fig. 1 and Fig. 4*b*), but when seen alone were not typical enough to be diagnostic in the absence of larger fragments. This is often the case when sediment from pleural fluid is examined.

The failure of thoracentesis to relieve the dyspnea is significant, as is rapid reaccumulation of the fluid. Although neither of these findings is peculiar to pleural mesothelioma, the combination should suggest it.

The principal obstacle to correct premortem diagnosis of mesothelioma is its rarity. Most clinicians are naturally reluctant to make the diagnosis of pleural mesothelioma as long as any possibility of bronchogenic carcinoma remains. The difficulty inherent in examining a lung surrounded by fluid and encased in tumor tissue may make it impossible to completely rule out a pulmonary origin clinically.

Treatment of these neoplasms has not been successful. The value of exploratory thoracotomy is dubious, even in the event of early diagnosis, since the lesion seems either to arise in many places at once or to spread rapidly to many new locations on the pleural surfaces. It must be considered, however, that since the condition is invariably fatal, any procedure presenting even the remotest chance of survival is not to be condemned.

SUMMARY

A case of diffuse pleural mesothelioma is reported. The varied cell types of this and other reported mesotheliomas are explained on the basis of the multiple developmental possibilities of mesothelial cells. Some unusual clinical features are remarked upon, and characteristics of value in diagnosis are discussed.

REFERENCES

1. Adami, J. G.: Principles of Pathology, 1:812, Lea and Febiger, 1908.

2. Berliner, K., Hemorrhagic Pleural Effusion; an analysis of 120 cases, Ann. Int. Med. 14:2266 (June) 1941.

3. Birnbaum, G. L., Primary Mesothelioma of the Pleura, with report of a case, Quart. Bull. Sea View Hosp. 4:462 (July) 1939.

4. Doub, H. P., and Jones, H. C., Endothelioma of the Pleura; Clinical and Roentgenologic Study of Three Cases, Radiology 39:27 (July) 1942.

5. Du Bray, E. S., and Rasson, F. B., Primary Mesothelioma of Pleura, A Clinical and pathologic contribution to pleural malignancy, with Report of Case, Arch. Int. Med. 26:715 (Dec.) 1920.

6. Ewing, J., Neoplastic Diseases, Fourth Edition: 355, W. B. Saunders Co., 1940.

7. Geschickter, C. F., Mesothelial Tumors, Am. J. Cancer 26: 378 (Feb.) 1936.

8. Klemperer, P., and Tedeschi, C., Pleural Mesothelioma, J. Mt. Sinai Hosp. 8:710 (Jan.-Feb.) 1942.

9. Maximow, A., Ueber das Mesothel (Deckzellen der serosen Haute) und die Zellen der serosen Exsudate. Untersuchungen an entzundetem Gewebe und an Gewebskulturen, Arch. f. exper. Zellforsch 4:1, 1927.

10. Robertson, H. E., "Endothelioma" of the Pleura, J. Cancer Research, 8:317 (Oct.) 1924.

11. Saccone, A., and Coblenz, A., Endothelioma of the Pleura, with Report of Two Cases, Am. J. Clin. Path. 13:186 (April) 1943.

12. Stout, A. P. and Murray, M. R., Localized Pleural Mesothelioma: Investigation of Its Characteristics and Histogenesis by the Method of Tissue Culture, Arch. Path. 34:951 (Dec.) 1942.

13. Wagner, E., Das Tuberkelaehnliche Lymphadenom. Arch. d. Heilk, 11:497, 1870.

14. Young, J. S., Experimental production of Metaplasia and Hyperplasia in the Serosal Endothelium, and of Hyperplasia in the Alveolar Epithelium of Lung of Rabbit, J. Path. and Bact. 31:265 (April) 1928.

BAD POSTURE UNDERMINES HEALTH

Poor posture is ugly, fatiguing, and damaging to the health, according to the October issue of *Hygeia*, the health magazine of the American Medical Association.

Jerome S. Peterson, M. D., district health officer in New York City's Department of Health and an associate of the Long Island College of Medicine, cautions that "poor health, depressed mental attitude, and bad posture seem to go together."

Poor posture is usually associated with sloppy habits, laziness, and inefficiency, whereas the healthy, happy, and successful person is always pictured as one who walks with head erect and chest out. Moreover, bad posture will throw the body out of alignment and may do serious damage to the internal organs as a result of unnatural compression. Thus, not only your health and appearance are affected, but poor posture is usually taken as a reflection of your personality.

Dr. Peterson's formula for improving the posture is: "Stand correctly; stand as tall as possible without rising on your toes. Get your feet a few inches apart and point your toes forward. Hold your head up. Bring the chin in. Your chest should be up. The lower abdomen should be in and flat, but don't strain yourself and don't become stiff. Let your hands hang loosely at your sides. Be conscious of your posture, but try to be relaxed at the same time."

THE RUPTURED INTERVERTEBRAL DISK

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The recognition and treatment of the ruptured intervertebral disk has become sufficiently refined now that not only can accurate localization be made but the removal of the disk can be effected with little disturbance to the patient.

The general geography of the area is simple: The vertebral bodies are held together, around their rims, by an exceedingly tough structure, the annulus fibrosus, which actually extends part of the way between the vertebra like a washer. The remaining central area is occupied by the intervertebral disk (nucleus pulposus) and is cartilaginous in character.

Schmorl, in 1927, brought attention to the many abnormalities of these intervertebral disks, and was particularly interested in the number of them which ruptured into the spongy bodies of the vertebrae. This condition was found in 38 per cent of routine autopsies in which these protrusions were found through the length of the spine, and not especially in the lumbar area. Symptoms which arise from these intervertebral protrusions are probably not from pressure *within* the vertebra but from alterations in the area of the nucleus pulposus. Perhaps many instances of low back pain are due to this, but it is difficult to prove since these lesions do not show up in roentgenograms.

It is evident that protrusions into the *spinal canal*, which usually occur in the lumbar area, must be through a pre-existing relatively weak area of the annulus fibrosus.

About five or six years ago, in numerous centers the diagnosis of protruded nucleus pulposus was being made with increasing frequency. It was immediately obvious that the greater percentage of these occurred in the spaces between the fourth and fifth lumbar vertebrae or between the fifth lumbar vertebra and the sacrum. Iodized oil, lipiodol, and preparations like pantopaque were devised for injection into the spinal canal for more accurate localization of these indentations of the dura made by the protruded disk. This was not eminently satisfactory because of the reaction set up by the oil itself and the further undeniable fact that lesions were missed.

The use of air intraspinally was similarly used and is now largely discarded for the reason that it too failed to show many lesions which were subsequently found at operation.

These procedures are not thought necessary now, for in most cases localization can be made from the history and examination. About half the time there has been a pre-existing back injury which the patient remembers; following this (although a symptom free period may elapse) there develops a pain in the leg which is quite adequately defined as sciatica. A very suggestive symptom is increased pain down the leg brought about by coughing or sneezing.

On examination of the patient there are three extremely significant findings:

1. First is a localized tender area just lateral to the midline and on a level with the interspace where the protruded disk lies. Pressure here will make the pain worse and frequently will produce sciatica.

2. A second important sign is an alteration in the knee and ankle reflexes in which the reflex on the involved side may be diminished or absent, but never increased. While this is most suggestive of the presence of a ruptured disk, it is not completely reliable localization, although an altered ankle jerk is a little more likely to suggest that the lesion is between the fifth lumbar vertebra and the sacrum.

3. The third and most accurate means of localization is change in sensation, both tactile and pain. The area of anesthesia or hypesthesia can be well outlined on the foot and leg, and by comparison with nerve supply charts, completely accurate localization can be effected.

Other signs, of less convincing value, are also frequently present. One is a scoliosis away from the side of the lesion (which is never in the midline). A second is atrophy of the entire lower leg, especially of the calf, but this depends largely on the elapsed time and the severity of the compression of the nerve root. There may be found drooping and flabbiness of the buttock on the involved side.

Still another is the unilateral narrowing of the intervertebral space as seen in an anteroposterior roentgenogram of the area; and while one should logically expect a good deal of help from this, in my experience it has been the most unreliable and inconstant of them all.

DIFFERENTIAL DIAGNOSIS

1. Confusion with sacro-iliac and with lumbo-sacral back strains is not difficult because these seldom present a persistent sciatica or any neurological changes. Furthermore they do not last as long and there is

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usually marked remission of pain between attacks.

2. On the other hand, sciatica alone, especially if it has persisted for months or years, can often be misleading. Even if thought to be on the basis of arthritis, and with definite evidence of arthritic spondylitis in the roentgenograms, in selected cases exploration of the nerve roots may be justified. If no protrusion of a disk is found, very often the decompression of the nerve root will bring about considerable symptomatic relief.

3. Spondylolisthesis is a rarer deformity which may simulate the "disk syndrome," and may always be diagnosed by lateral roentgenograms of the lower lumbar area.

4. Spinal cord tumor, or a tumor of the nerve roots within the dural sac, is usually differentiated at operation, at which time the dural sac is found to be tense, firm, and distended.

The operative procedure is now far less extensive than those in common use four or five years ago when often the entire lamina of one or more vertebra was removed.

The patient is placed face down on a flat operating table with the fifth lumbar area over the hinge where the table breaks. In addition a small sandbag or firm pillow is placed under the lower abdomen at the level of the iliac crests.

An incision about four inches long is made in the midline over the tips of the lower lumbar spinous processes. The fascia uniting the sacrospinalis muscle groups to the spinous processes is dissected away from the latter, and the muscle reflected laterally with a periosteal elevator and held there by retractors. The laminae of the involved vertebrae are exposed and the ligamentum flavum excised with a small, sharp, long handled blade.

Laterally the ligamentum flavum lies deeper and is thicker, and must also be dissected free. The first structures seen below are the dural sac and the nerve root in question. Gentle retraction of the nerve root medially is necessary in order to view the protruded nucleus pulposus. It is important to note that any harm done the nerve root will result in usually permanent damage to the leg.

If the protruded nucleus pulposus is not completely extruded, a small incision over its bulging surface may be made and the nucleus removed. The remaining cavity is curetted to assure complete removal of disk fragments. Usually little or none is found.

If it is not necessary to explore an adjacent interspace, a small amount (1 or 2 Gm.) of mixed sulfanilamide and sulfadiazine crystals are dusted in the wound and closure done in layers with silk.

Convalescence is uneventful as a rule. Occasionally catheterization is necessary. The patient may have a few transient pains over the distribution of the sciatic nerve, but these disappear in several days. The patient may be allowed up in from seven to ten days and can return to light work in two or three weeks. He is cautioned against lifting and straining for the succeeding six months, and is warned against ever returning to heavy manual labor.

There remain only three lesser items to be considered:

1. First is the problem of more than one protruded disk being present, and this is a real source of concern. Fortunately it occurs in only one in a hundred times. If more than one sensory area of the leg is involved, then inevitably both corresponding nerve roots must be explored. If not, on rare occasions when two lesions are present and the first operation gives only partial relief, a second operation may have to be performed.

An interesting and unusual find was made in a recent patient who had the classical symptoms of back pain with sciatica. There were anesthesia over the first sacral nerve distribution and a diminished ankle jerk. Exploration of the lumbo-sacral space and the space above at first seemed normal until passage of a probe which went easily into the lumbo-sacral intervertebral space. The protruded disk was not found until the lamina of that side was removed. The mass of disk tissue had displaced upward almost to the interspace above. It was not necrotic, and had apparently received nourishment from the vessels in the epidural fat to which it was lightly adherent.

2. The second consideration is of protruded disks at other levels, usually occurring in the cervical area and giving rise to intractable brachial neuralgia. The protrusion occurs more laterally in this area, often wedging the nerve against its foramen in the bone. Of these I have only seen one, but pain disappeared promptly after removal of the offending disk.

3. What happened to these patients before the cause and its correction were known? Certainly many of them graduated into the "game leg" class, occasionally painless, with seriously limited muscular powers, with atrophy and usually some exacerbation of the old pain from time to time.

One such patient on whom I operated had had symptoms sixteen years with the typical neurological changes, and was still having pain. After removal of the offending disk

the pain was abolished. However, in the two years following he has regained only a third of his lost function, and still has an absent ankle jerk as well as persistent numbness over the nerve root distribution.

In contrast, patients who have had their lesions no more than several years can expect nearly complete return of function. However, even in the recent cases, altered reflexes are the last elements regained.

As patients with suspected protrusion of the nucleus pulposus occasionally fall within the realm of compensation, the question of malingering often arises. The attendant confusion is not as great as one might suspect for two reasons:

First, the neurological changes of the reflexes and of altered skin sensation are difficult to simulate.

Second, patients who are actually having the persistent pain accompanying protruded disks are more eager to have an operation performed than are those who are magnifying the insignificant disorders.

Several papers have appeared in the last two years, notably those of Drs. Dandy and Key, suggesting that all cases of low back pain, including lumbo-sacral and sacro-iliac "sprains" as well as spondylolisthesis, are due to "lesions" of the intervertebral disk.

Certainly the greater proportion of these cases will respond to conservative therapy. The measure used most successfully is injection of novocaine. Failure of conservative measures to relieve such cases might justify exploration of the intervertebral spaces, although very few surgeons of my acquaintance have found it necessary.

CONCLUSION

The diagnosis and the operative removal of the protruded nucleus pulposus have become remarkably refined in the past few years.

It has been our policy to follow and study these cases over a period of six weeks at least, following injury, before recommending operative intervention. Many of the patients have had symptoms for many months and years, and in these instances we have been content to examine them at least three times over a period of one week before operation to assure ourselves that the neurological changes and the symptoms are constant and are consistent with the diagnosis. We formerly observed these cases for several months before advising operation, and there are many surgeons who recommend even longer periods of conservative treatment.

At present, particularly in the clear-cut cases with intractable pain, the tendency is toward earlier operation, while in the doubtful and atypical case, all conservative measures (traction, plaster jacket, vitamin B complex, bed rest, heat, diathermy, and novocaine injections) are tried first.

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PREVENTABLE FETAL DEATH

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Fetal death is caused by a large number of conditions both intrinsic and extrinsic to the fetus. Those which are genetically determined can be altered or permanently controlled only by genetic manipulation. Those which are developmental accidents may be based not on gene deficiencies or lethal factors in the fetus but take their origin in abnormal maternal serum or in complicated protein interactions across the placenta. The latter depend on incompatibilities between mother and fetus. In such cases, if the fetus is developed enough to maintain itself, premature separation from the mother removes deleterious influences and normal development proceeds. The same argument applies to those cases in which the maternal circulation carries drugs or toxins or active agents of disease which pass across or infect the placenta or change its permeability. In most of these cases death is not operative as an agent of natural selection and any measure used to save the fetus is eugenic therapy. As Potter said in 1918, causes of death operating during late pregnancy will never operate again.

We have recently become aware of the Rh antigen which is a genetic factor not in any way lethal or defective except under one particular circumstance—the fetus must carry the factor in a mother that does not. Even with this combination present only one out of twenty fetuses is affected. In a primipara it is not affected unless the mother has been previously sensitized. Both Davidson and Hunt have written good summaries of Rh mechanisms. At John Sealy Hospital last December we had a case of erythroblastosis and hydrops in a primipara who had been given blood transfusions twice ten years earlier. We have also seen two children in a family of four, show signs of erythroblastosis at birth and progressively deteriorate. Cook, in 1944, related Rh to mental deficiency. Because Rh erythroblastosis is rare it is difficult to secure enough antibody for test purposes. Every obstetrician who finds such cases should report to the serologist at his

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nearest blood bank to collect serum of this valuable type. The testing of female infants for Rh antigens is important prior to any transfusion and, in the near future, women contemplating marriage will become interested in their own Rh status.

Another type of fetal death, somewhat similar to the Rh picture and less well understood, is represented in 3 cases in this hospital this year. In each of these there is a history of several normal children, all heavy at birth, and showing increasing unresponsiveness at successive births. Each terminated the series with an edematous, full term, overweight stillbirth. Death occurs shortly before the birth. There is no extensive blood destruction nor erythroblastosis. There is complete acute destruction of the liver and of the renal tubules (not glomeruli, Henle loops nor ducts). Placentas and cords are proportionately large but normal microscopically. We are very much interested in the suggestion of Miller, et al., that such conditions may represent a prelude to active diabetes mellitus. If so, it raises a pertinent question regarding the serology of the prediabetic state because there is no glycosuria when the damage occurs. Even if there were it would not explain the profound effects produced across the placental barrier. Here is a field wide open to investigation.

Evidence is also accumulating concerning the etiology of stillbirth accompanied by developmental defects which of themselves seem not important enough to be a cause of death. Only recently experiments on nutrition and the classification of nutritional status in women at the beginning of pregnancy have been correlated with defective and normal fetal development. Allen, Macafee and Biggert in England, and Burke, Kirkwood and Stuart in the United States have shown excellent correlation. It is evident now that nutritional status should be made a record of the first importance on obstetric charts. Pregestational nutrition is just as important as that of late pregnancy. The specific neural effects of lack of vitamin A and skeletal effects of riboflavin are important studies by Hale and by Warkany. The whole picture of nutrition now ties up with effects of hypothyroidism and low basal metabolism which have been known for a long time. It was well stated by Litzenberg in 1939. Thyroid therapy to keep up basal metabolism which has been depressed by gestation and vitamin E or pituitary extracts have been clearly indicated to keep a hypersensitive uterus from reacting prematurely. These were analyzed by Falls in 1940.

Our interest in this problem includes studies on parathyroid and thyroid as well as an attempt to link superficial developmental defects to some deeper mechanism.[19] We have shown that serum calcium deficiency because of diet or hypoparathyroidism causes hypertrophy of fetal parathyroids in a quantitatively related equilibrium. It is known that the defects appear in tissue whose primordia at some time or other have very rapid rates of growth, either splitting into secondary axial extensions or uniting into common structures. Thus the lips, palate and nose often form a group together with failure of the vertebral arch to be completed. The fingers and toes web or duplicate and the complex alterations of the urogenital structures makes urology very much a study of anomalies. These are often associated with vascular deviations or abbreviations which are found only by very close study. Because they are omitted from published studies does not imply that everything not described was normal. In very early embryos the primary defect is often in the hemapoietic system and is seen secondarily in avascularity of the villi. This is fatal. Murphy and many others have concluded that these things are gene determined and our studies support the findings that they are familial. However, geneticists have found marked variability in localization and degree of expression of the abnormalities which again points to some underlying mechanism subject to external influences. Individuals are known to differ in their requirements for specific nutritive factors and for oxygen. If the reserve of these elements at the placental boundary is not sufficient they suffer.

Our intensive microscopic study of the placenta shows that placentas at term are not uniform in their state of differentiation. The younger they are structurally the more selective and less efficient they are.[20] This fact alone could determine, at critical moments, the withholding of essential things which the fetus cannot synthesize for itself. Any maternal factor altering that permeability is important. Before we can be sure that our problem is primarily genetic we must rule out inferiority of nutrition. Ratner's suggestion that the passive transfer of proteins across the placenta is a mechanism by which the problem of the inheritance of acquired characteristics might be approached should not be taken too seriously, though no suggestion should be discarded because of its unfamiliarity.

A few specific viruses have been traced across the placenta late in gestation.[13] We need much more knowledge as to the particular conditions under which this is possible in order to be on our guard. Organisms that will not pass may be disregarded; those

which enter only at the end of pregnancy may be circumvented. It is valuable to know the potential dangers to which an infant is subjected as soon as possible.

Several months ago we started taking cord blood smears as a routine to see if we could correlate the blood picture with the neonatal history or other events. The smears were far from perfect and often the staff was too busy to make them when the most interesting cases appeared. After establishing normals, one smear appeared with a very high leukocytosis, mostly polymorphonuclears. Investigation showed the infant not acutely ill but lethargic. The mother and the baby were both studied and both showed some acute systemic infection. It cleared up in three days before we could determine its exact nature but the cord blood smear definitely demonstrated its presence at birth. Most premature stillbirths were lacking polymorphonuclear cells. Other interesting correlations were found in these differential studies, and it is suggested that cord blood smears furnish a base level for later comparisons that is of considerable value in ruling out or establishing the neonatal factors responsible for infant morbidity. No pediatrician wants to take responsibility for infections picked up in the nursery, and a cord blood smear may clear him.

Early aborted embryos are generally grossly malformed. Of fifty embryos in our collection below 28 mm. length, cut into serial sections, not one is normal except six removed surgically in sterilization operations or accidentally found in uteri where pregnancy was not suspected. This cannot be said of those aborted late in gestation. Here presumptive development has long been determined and only peripheral or non-fatal defects will appear. Gross cardiac anomalies are generally not critical until after birth. Serological fetal abnormalities directly related to composition of maternal serum are common and these, we hope, can be predicted in time to save the fetus by intervention. We must not remain fatalists about fetal death but learn that premature separation of the placenta and other unfavorable uterine conditions are preventable. Until we learn to control them we are in no position to say that fetal death claims the unfit. The fetus and its mother are independent genetic entities with a certain amount of common physiology. There is much hope for the near future.

REFERENCES

1. Allen, F. M. B.; Macafee, C. H. G., and Biggart, J. H.: Neonatal Mortality, J. Obst. & Gynec., Brit. Emp. 50:417-426 (Dec.) 1943.
2. Burke, B. S.; Beal, V. A.; Kirkwood, S. B., and Stuart, H. C.: Influence of Nutrition During Pregnancy upon the Condition of the Infant at Birth, J. Nutrition, 26:569-583 (Dec.) 1943.
3. Collins, C. G.; Weed, J. C., and Collins, J. H.: Treatment of Spontaneous, Threatened or Habitual Abortion, Surg., Gynec. & Obst. 70:783-786 (April) 1940.
4. Cook, R.: The Rh Factor as a Cause of Mental Deficiency, J. Hered. 35:133-134 (May) 1944.
5. Davidsohn, I.: Fetal Erythroblastosis, J. A. M. A. 127:633-638 (March 17) 1945.
6. Falls, F. H.: Use of Progestin in Obstetrical Complications, Illinois M. J. 77:180-185 (Feb.) 1940.
7. Flexner, L. B., and Gellhorn, A.: Comparative Physiology of Placental Transfer, Am. J. Obst. & Gynec. 43:965-974 (June) 1942.
8. Gellhorn, A.: Placental Transmission of Radioactive Isotopes, Proc. Conf. Probl. Human Fertil. pp. 158-166, 1943.
9. Ginzler, A. M., and Chesner, C.: Toxic Manifestations in the Newborn Infant Following Placental Transmission of Sulfanilamide, With Report of Two Cases Simulating Erythroblastosis Fetalis, Am. J. Obst. & Gynec. 44:46-55 (July) 1942.
10. Hale, F.: The Relation of Maternal Vitamin A Deficiency to Microphthalmos in Pigs, Texas State J. Med. 33:228-232 (July) 1937.
11. Hunt, A. B.: Rh Factor in Repeated Abortion and Miscarriage, Proc. Staff Meet. Mayo Clin. 20:26-28 (Jan. 24) 1945.
12. King, E. L., and Herring, J. S.: Hypothyroidism in Causation of Abortion, Especially of "Missed" variety, J. A. M. A. 113: 1300-1302 (Sept. 30) 1939.
13. Levine, S.; Bullowa, J. G. M., and Schienblum, I. E.: Antepartum Transmission of Lymphogranuloma Venereum Antibodies and their Duration in the Infant, J. Immunol. 47:439-442 (Dec.) 1943.
14. Litzenberg, J. C., and Carey, J. B.: Relation of Basal Metabolism to Gestation, Am. J. Obst. & Gynec. 17:550-552 (April) 1929.
15. Macy, I. G.: Nutrition and Chemical Growth in Childhood, Vol. 1, Springfield, Charles Thomas, Publisher, 1942.
16. Miller, H. C.; Hurwitz, D., and Kuder, K.: Fetal and Neonatal Mortality in Pregnancies Complicated by Diabetes Mellitus, J. A. M. A. 124:271-275 (Jan. 29) 1944.
17. Potter, E. L.: Postmortem Examination of Stillborn and of Newly Born Infants, Arch. Path. 25:607-636 (May) 1938.
18. Ratner, B.: Passage of Native Proteins Through Placenta, Proc. Conf. Probl. Human Fertil. pp. 167-182, 1943.
19. Sinclair, J. G.: Fetal Rat Parathyroids as Affected by Changes in Maternal Serum Calcium and Phosphorus Through Parathyroidectomy and Diteary Control, J. Nutrition, 23:141-152 (Feb.) 1942.
20. Snyder, F. F.: Placental Transmission in Relation to Stage of Pregnancy, Proc. Conf. Probl. Human Fertil. pp. 144-157, 1943.
21. Warkany, J.: Congnital Malformations Inducd by Maternal Nutritional Deficiency, J. Pediat. 25:476-480 (Dec.) 1944.
22. Warkany, J., and Schraffenberger, E.: Congenital Malformations Induced in Rats by Maternal Nutritional Deficiency; Preventive Factor, J. Nutrition, 27:477-484 (June) 1944.

TYPHUS CONTROL, A BORDER PUBLIC HEALTH PROBLEM

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Historical.—The typhus situation in Texas is reflected in the statistical records of the State Health Department, showing a steady increase in the incidence of the disease since 1930. In 1930, 13 cases were reported from 6 counties; in 1933, 398 cases from 67 counties; in 1942, 1,204 cases from 113 counties, and in 1944, 1,740 cases from 137 counties, with 55 deaths for the first eleven months of the year. These statistics indicate that typhus control is assuming the proportions of a major public health problem in the State of Texas.

The earliest recorded appearance of typhus in Texas seems to have occurred in 1847 during Scott's invasion of Mexico with the United States Army, as a considerable number of soldiers contracted the disease at that time.

It is believed that most cases throughout the state can be traced to the origin along the Mexican border.[1] I quote from the Proceedings of the Rat Control Conference con-

ducted by the State Department of Health, Austin, Texas, in 1938:

"Typhus fever in Texas was first reported in 1915 when an outbreak occurred along the Mexican border. In 1916, McNeill reported 5 cases at Galveston. In 1926, Macy of the United States Public Health Service, was sent to Texas to study typhus along the Mexican border. At that time he reported that it was a disease transmitted from rodents to man by the bite of some of the blood-sucking insects, or arachnids. Since then, Dyer, Cedar, Runveich, and Badger, have proven that the rat flea (Xenopsylla cheopis) serves as the vector of the disease and that the rat is the reservoir host."[1]

Dr. S. W. Bohls of the Texas State Health Department, in an article published in the *Southern Medical Journal,* in 1935, says that "The geographic distribution of typhus fever has been chiefly in south and east Texas, the lower Rio Grande and winter garden areas. Cases have been reported as far north as Fannin and Red River Counties, and as far west as Lubbock County. Thus we have a health problem in Texas that is rapidly gaining in proportions."

The recently organized United States-Mexico Border Public Health Association took cognizance of the typhus menace along the border, and at its June, 1944, meeting endorsed a resolution with the following recommendations: (1) a more uniform and accurate reporting of typhus cases and a systematic epidemiological study of the reported cases; (2) an adequate educational program to inform the public regarding the disease; (3) implementation of adequate typhus control programs in all towns located along the Mexican border.

The story of endemic typhus fever begins in 1898, at which time Dr. Nathan Brill of New York City studied a series of cases of a disease prevalent among immigrants, which resembled typhoid fever and was being erroneously diagnosed as typhoid and paratyphoid. Brill succeeded in differentiating this disease from typhoid and observed that it resembled the European (epidemic) typhus fever. However, there were certain striking differences between this disease and the epidemic typhus of Europe. Brill's disease ran a much milder course, the seasonal distribution was different, and the outbreaks were sporadic. Brill's cases had the following symptoms: high fever, severe headaches, prostration, and the characteristic red macular rash. Epidemic typhus is more prevalent in winter, while the peak incidence of Brill's disease occurs in the summer. Furthermore, epidemic typhus carried a mortality up to 70 per cent, while that from Brill's was only about 2 per cent.

At the time Brill was making his observations in New York City, Anderson and Goldberger of the United States Public Health Service were sent to Mexico to study "tabardillo," or Mexican typhus fever. Goldberger, himself, contracted Mexican typhus fever, but studies were resumed in the fall of 1911. These workers observed the marked clinical resemblance between the Mexican tabardillo and Brill's disease. They found that an attack of Brill's disease conferred an immunity to subsequent infection with Mexican typhus, and concluded that Brill's disease was identical with the typhus fever, or tabardillo of Mexico.

In 1926 Dr. Kenneth Maxcy of the United States Public Health Service toured Georgia and Alabama, investigating the numerous cases of typhus reported. He observed that all the cases followed the same pattern, that is, fever up to 105 F., prostration, rash, fatigue, and a very low death rate. He also noted that this disease was not the disease of the poor and oppressed as it was in Europe; cases were found among the upper strata of society and included lawyers, bankers, and merchants. He was led to believe that the body louse was not the exclusive vector.

During the course of a small typhus outbreak in Baltimore, Dr. R. E. Dyer of the United States Public Health Service investigated the possibility of the rat flea as a vector of the disease. He combed rats obtained from a drug store in an epidemic area and identified the flea as Xenopsylla cheopis. He then chloroformed the fleas, ground them up, and injected the flea debris into a guinea pig. A few days later, the pig came down with so-called Brill's disease. Incidentally, Dyer, himself, contracted the disease. These experiments incriminated the rat flea as the vector. It soon became evident that endemic typhus was primarily a disease of rats, and, secondarily, a disease of man.

The pioneering work in typhus control in the United States is credited to Dr. Clifford R. Eskey, veteran rat fighter of the United States Public Health Service. Dr. Eskey's extensive experience in combating bubonic plague throughout the world peculiarly fitted him for this task. In his capacity as Medical Director of the U. S. Public Health Service Typhus Control Unit, he has expanded the program in the southern states where typhus is most prevalent.

MODE OF TRANSMISSION AND DIAGNOSIS

Although the exact mechanism of transmission of endemic typhus has not been definitely established, it is generally agreed that the rat flea (Xenopsylla cheopis) living on typhus infected rats is the insect vector. The disease is transmitted from rat to rat, and finally to man as a result of the flea bite. Some believe that man is infected by the or-

ganism excreted by the flea and introduced through the bite.

After an incubation period of six to fourteen days, the disease develops, usually with an abrupt onset marked by headache, chills, fever, weakness, general pains, and some degree of prostration. During the course of the disease, on the fifth or sixth day, a macular eruption appears on the trunk. The disease runs quite a definite course, terminating in rapid lysis after about two weeks of fever. A positive Weil-Felix reaction is valuable as confirmation of the diagnosis.

THE TYPHUS PROBLEM IN LAREDO

Table 1 shows the number of typhus cases reported from Laredo, and the deaths by month for the year 1944. There was a sharp upturn in the number of typhus cases reported during the period January to June, with the peak incidence being reached in June when a total of 58 cases with 1 death was reported; from July to December there was a gradual decrease. It is seen that typhus has a seasonal distribution, most of the cases occurring in the summer months of June, July, and August.

As an emergency measure, to cut down the typhus rate, an intensive rat poisoning campaign was conducted in the business section

TABLE 1.—*Reported Typhus Cases and Deaths in Laredo, Texas, 1944.*

Months	Cases	Deaths
January	1	1
February	2	0
March	0	0
April	3	0
May	8	0
June	58	1
July	39	1
August	9	1
September	6	1
October	2	0
November	1	0
December	0	0
Total	129	5

of the city under the supervision of the United States Fish and Wild Life Commission during July; in September the campaign was extended to the residential section of the city.

Epidemiological investigations were made in each case reported by name and address. A spot map of the city was then prepared showing the location of the cases, place of employment, stores visited, and theatres attended. In this manner the so-called "hot spots" of rat infestation were definitely located so that the poisoning campaign could be concentrated in these areas. A large majority of the cases were reported from the main business district of the city.

It was soon realized that typhus control was a health problem of major importance in Laredo, and that there was a definite need for an adequate permanent typhus control program. The need for such a program is more urgent during the war emergency and in military and industrial areas because of the drain on manpower and subsequent detrimental effect on the war effort.

Through the medium of newspaper publicity and a mass meeting sponsored by the Laredo Chamber of Commerce, the interest of the public was aroused to the point where the Chamber of Commerce sponsored the passage of a typhus control ordinance by the City Council, requiring the rat proofing of all business establishments in the city. The ordinance went into effect on August 1.

The rat poisoning campaigns were only temporary control measures and it was realized that unless a permanent typhus control program was instituted, a recurrence of rat infestation and a subsequent rise in the typhus rate could be expected. Permanent results can be obtained in combating the spread of typhus only by a continuous program of rat stoppage and rat proofing of business establishments. To make food and shelter inaccessible to the rat is the essential aim of rat proofing and rat stoppage.

TABLE 2.—*Summary of Activities, 1944, City of Laredo Typhus Control Unit.*

No. of establishments rat proofed	77
No. of establishments treated for rat eradication (poisoning and trapping)	73
No. of establishments declared free of rats	24
No. of poison baits distributed in residential areas	1,500

In due time plans were made for the implementation of a permanent typhus control program.

THE TYPHUS CONTROL PROGRAM IN LAREDO

Following the passage of the rat proofing ordinance, the City Council appropriated the sum of $3,000.00 as a revolving fund to be used in rodent control to cover the expense of purchasing materials and payment of labor costs, which is then recovered by assessments made for work done. In other words, these funds are expended and recovered, so that the original amount will serve to conduct operations indefinitely, or as a revolving fund.

In due time a typhus control unit was organized with the assistance of Dr. John J. Essex, Sanitarian (R.), U. S. Public Health Service, and H. L. Draper, typhus control engineer of the Texas State Health Department, which included two engineering aides from the U. S. Public Health Service, and two rodent control sanitarians appointed by the city. This unit was charged with the responsibility of conducting the typhus control program and enforcing the provisions of the ordinance. The program was under the general direction of the local health director. The engineering aides were also responsible

for the training of the city sanitarians in effective rodent control measures.

Actual work was begun October 1, after one month of preliminary operations, during which time space in the city hall was converted into headquarters and workshop for the typhus control unit, and a suitable truck was equipped as a mobile workshop.

METHODS OF PROCEDURE IN CONDUCTING THE TYPHUS CONTROL PROGRAM[2]

1. *Newspaper publicity.* An effort was made to release as many newspaper articles as possible regarding the program, emphasizing the necessity, objectives, and manner in which it operated.

2. *Rodent control in residential districts.* Poison baits were made available to the general public for use in private homes during the rat poisoning campaign. These were sold at a nominal price.

3. *Estimate of cost of construction in connection with rat proofing or vent stoppage.* Rat proofing refers chiefly to blocking off or stopping up all actual or potential passages by which rats are entering or may gain entrance to old or existing buildings. This aspect of rat proofing may be designated as "rat blockage" or "rat stoppage." To accomplish this objective it is necessary to seal all avenues of entrance in basements, ground floors, walls, and roofs of buildings. It also includes the elimination of rat harboring places inside buildings.

4. *Estimate of degree of rat infestation.* A rat infestation inspection of a building is a survey to locate all actual or potential openings by which rats may enter it, and to find and interpret any signs that may be present of the existence of rats within it. The four most important signs of rat infestation are runways, droppings, tracks, and gnawings.

5. *Signing of contract by property owner for construction and eradication work.*

6. *DDT (dichloro - diphenyl - trichloroethane).* Dr. David E. Davis, U. S. Public Health Service, working in the San Antonio City Health Department, demonstrated that the new powerful insecticide, dichloro-diphenyl-trichloroethane, commonly known as DDT, was very effective in destroying fleas found on rats in buildings which are heavily rat infested. Dr. Davis feels that by eliminating fleas from rat infested buildings, the danger of such premises being the source of typhus will be greatly reduced. Accordingly, it is planned to employ this product to combat typhus in connection with the local typhus control program, and a small supply will be made available to the Unit. A preparation of DDT-flour mixture will be used in buildings after they have been rat proofed and before starting rat eradication measures; small patches of the mixture will be sprinkled throughout the building wherever rats are likely to travel. It was pointed out that this chemical is toxic when ingested, so that any danger of its contaminating food should be avoided. According to health authorities, DDT will not only kill fleas; it is also very effective in reducing flies, cockroaches, bedbugs, lice, and agricultural pests such as leafworm, moths, sugar cane borers, and aphids.

7. *Rat eradication.* The chief rat eradication methods are the following: (a) poisoning, (b) trapping, (c) fumigation.

Since red squill has become relatively difficult to obtain as a result of the war, it is necessary that other poisons be substituted in the destruction of rats during poisoning campaigns. Thallium sulphate was found to be an effective substitute. Red squill was distributed to the public for use in private residences, and both thallium and red squill were employed in the business districts. Since thallium sulphate is poisonous to humans and domestic animals, it was not used in the residential areas. Suitable poison baits were prepared and both poisons and baits were varied frequently.

Trapping is a good means of eliminating rats if sufficient traps are used, and if the trapping campaign is carried out by experienced personnel. Both steel and wooden traps were used, the steel traps furnishing live rats which were combed for fleas and bled for typhus tests.

Fumigation in certain types of buildings, and under strict supervision, is a very effective means of destroying rats. Generally, a cyanide gas of a cyanide compound liberating gas is used. The cyanide gas is a very deadly poison and will do its work quickly and effectively. Cyanide poisoning for general use by the layman is not recommended. Under careful supervision, and when extreme safety precautions are observed, cyanide fumigation is very successful.

Business establishments which have been rat proofed and treated for rat eradication are inspected every thirty days for evidence of rat infestation, and the property owner is notified when his establishment has been declared completely free from rats. The business section is covered by the program, square block by square block, and every building within the block is included. The program is planned to cover only commercial establishments and other places of public gathering.

Inasmuch as garbage is a common source of food for the rat, the garbage collection sys-

tem was carefully checked, and an effort was made to educate the public in the matter of proper garbage disposal. The general public was urged to use tight fitting covers on all garbage cans.

SUMMARY

1. The history of typhus control as a border health problem is presented and discussed on the State and local levels.

2. The typhus problem on the State and local levels is presented and discussed. In 1944, 1,740 cases from 137 counties with 55 deaths for the first eleven months of the year were reported from the State of Texas. In Laredo, 129 cases with 5 deaths were reported for the year 1944.

3. A brief discussion of the typhus control program in Laredo is presented along with a summary of activities for the year 1944.

REFERENCES

1. Proceedings of the Rat Control Conference, State Dept. of Health, Austin, Texas, 1938.
2. Eskey, C. R., Typhus Control Unit Manual, U. S. Public Health Service.

PLANNING A ROUTINE IMMUNIZATION PROGRAM

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The task of planning a routine immunization clinic program is more tedious and time-consuming than the task of administering the immunizations.

In preparing this paper I have taken for granted that the immunization program has been presented to and approved by the local medical society. I have strived to place most emphasis upon the methods that may prove helpful in getting clients into an immunization clinic. The method of approach varies between a routine school immunization clinic and a routine community immunization clinic.

Naturally, as in all phases of public health work, the people must be educated in the importance of having immunization against those diseases for which there is a known prevention. This is of primary importance to the person planning to hold a clinic. Unless the public is thoroughly educated as to the needs for immunization, hundreds of clinics may be held without administration of a single immunization.

The first approach to the educational problem is the use of local newspapers. If there is more than one newspaper in the county, efforts should be made to see that each publishes the desired information. The information should be published in the weekly editions as well as in the daily editions, since many rural people subscribe to the weekly and not to the daily paper.

News articles should thoroughly cover the importance of immunizations. Stress should certainly be placed upon the fact that "an ounce of prevention is worth a pound of cure." The articles should give the recommended ages at which the immunization ought to be administered and should give some idea as to when they ought to be repeated. The health officer may then begin to plan either a school clinic or a community clinic. The routine school clinic will be discussed first.

Prior to holding a school clinic, it is wise to meet with the various superintendents, principals, and teachers, and give them a thorough explanation of the purpose of the clinic. The teachers, in turn, can do much to pass on information to the pupils and to their parents. Much can be accomplished by meeting with the principals at the teachers' institute, generally called by the county school superintendent previous to the annual opening of the schools. At this meeting and at the meetings with the teachers emphasis should again be placed on the importance of immunization as well as a discussion of the procedure to be followed at the time the clinic is held.

If at all possible, the school immunization schedule should be worked out by the time the teachers' institute is held and this schedule should be placed in the hands of each person attending. If it is not possible to complete plans that early, the schedule should certainly be planned far enough in advance to allow sufficient time for the clinic to be worked up by each school before the physician's visit to administer the immunizations. The clinics should be held as soon as possible after the schools have opened. By allowing sufficient time for publicity the public health nurse in each district is enabled to educate further the public and the students in the need for the immunizations. Such a procedure will also allow ample opportunity for the children to take the necessary permission slips home, for the parents to check the desired immunization, and for the children to return the slips to their teachers.

If the territory is not too large or does not consist of too many schools, it may be possible to combine the school clinic into a community clinic. Regardless, every effort should be made to stress the importance of preschool children attending the clinics and receiving the immunizations. The size and the total number of schools are important factors in planning a schedule. It may be possible to

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hold clinics in several small schools in one day, or it may be necessary to spend an entire day in a large school.

The types of immunization to be given also have a bearing on the schedule. It may be necessary to plan to visit each school three or four times in order to complete immunizations requiring three injections.

It is a wise plan to have the newspapers publish the schedule upon its completion. This may apply even though the schedule is worked out to cover short periods at a time. In such publicity it should be stated that those who can should go to their family physicians.

In working with the teachers prior to the clinic and during the clinic, child psychology should be taught. By this is meant an attempt to solicit the aid of the teachers in promoting the good will of the children. If the children are properly handled much can be done to alleviate their fear of the needle. It certainly is not good child psychology to have a group of teachers standing around talking about the pain they experienced from hypodermics following some operation. Neither is it wise to have a group of teachers stand around and plainly state that they would not take the immunization for any one of the hundreds of reasons they can concoct. These pitfalls can be avoided and the clinic made to operate smoothly, provided sufficient time and effort have been spent to educate thoroughly and to "sell" the teachers on the program prior to the clinic. It is wise and well worth while to spend a little time with the children, as with care much can be done to alleviate the fear they might have towards doctors in the future.

The teachers may be held responsible for making out immunization cards on each student. A simple procedure to follow is to have the teacher place a check mark by the desired immunization. At the time of the clinic, each student may then hand his card to the doctor in charge, who can administer the immunization checked. Giving the teachers some responsibility for the success of the clinic does much towards furthering their interest and education.

The planning of a routine community immunization clinic deserves the consideration of the factors discussed under the school clinic as well as a decision on how all the communities may be reached. It may be decided that several communities can be adequately served by a central clinic. The clinic may be held at a schoolhouse, a church, or some other meeting place that is common to the people.

The schedule for community clinics depends upon the number of communities in the territory to be served and upon the time the doctor may allocate to the clinics. The size of the community will aid in determining the amount of time to be spent in that particular locality. Several small communities may be served in one day, whereas it may not be possible to serve more than two large ones the same day.

A very important factor in planning a community clinic is the necessity of reaching as many of the rural population as possible. It must be remembered that many rural people do not subscribe to any newspaper. Therefore, it is wise to seek other means of getting the information to them.

A good plan to follow is that of soliciting the aid of the county agent and the county home demonstration agent. These agents are generally eager to be of help. They have a list of leaders in each community, and these leaders, in turn, are usually very able workers in community projects. In addition to furnishing a list of the community leaders, the agents are usually happy to send the clinic schedule to each of the leaders and request that they pass the information on at all meetings which may be held in the community.

In many counties the agencies working with the rural populations are combined in an association known as the Agricultural Workers' Association. This group is a very good one to work through. A doctor may meet with this group and educate its members in the importance of immunizations, and they in turn will pass the information on to the rural people.

If time permits it is worth while to visit at least one active leader in each community and fully explain the program to him. In addition, it is profitable to make posters for use at various places in each community where a clinic is to be held. These placards may be posted at the main stores, at the churches, and at any other places where the people may gather from time to time. Church leaders are often very happy to make announcements regarding immunizations at the church services.

Although the above discussion treats the planning of routine school and community immunization clinics as separate entities, it should be clearly understood that any of the procedures followed for one may be followed for both.

ABSTRACT OF DISCUSSION

Dr. Chester P. Brown, El Campo: Dr. Ross's paper covers the subject of immunization clinics very satisfactorily and is well written. There are several phases of this subject, however, which, in my mind, need considerable clarification.

First, the State Medical Association should lay down fundamental rules for the establishment of this

type of clinic for the entire state. After all, county societies are just branches of the state organization. It seems to me that there would be less trouble where health units have been established if there were one general policy on this subject recommended by the state organization.

Second, the paper deals principally with the establishment of school immunization clinics, which should be of secondary consideration. More stress should be made by health units to get the children immunized long before they become of school age. With the permission of the medical societies, and all others concerned, it has been possible to reduce the incidence in and mortality of children of school and older ages from those communicable diseases for which immunization is available. It has been a great benefit to the people at large, but as most of these diseases occur now in the preschool ages, greater endeavor should be made to have the children immunized as early as possible in life. This should be accomplished by education of the non-indigent as to where they can receive immunization service without charge or for a nominal fee. It would then be possible to reach a point where these diseases would be almost non-existent, and there would be no need of school immunization clinics except for the neglected child.

I believe that the present method of not doing very much for a child until he has entered school is defeating the object, which is the prevention of communicable diseases for which we have immunization. I believe that under the present system of waiting until the child goes to school to attack this problem, a great many parents are saying, "Let's wait until the child goes to school and then he will be immunized." Certainly statistics show that most diseases such as diphtheria and whooping cough are more prevalent in preschool age, and that the mortality rates are a great deal higher in the young infant when he contracts the disease.

MISCELLANEOUS

COMING MEETINGS AND CLINICS

State Medical Association of Texas (House of Delegates), Waco, November 13. Dr. H. F. Connally, Waco, President; Dr. Holman Taylor, 1404 W. El Paso St., Fort Worth, Secretary.

American Medical Association (House of Delegates), Chicago, December 3-6. Dr. Herman L. Kretschmer, Chicago, President; Dr. Olin West, 535 North Dearborn Street, Chicago, Secretary .

Southern Medical Association, Cincinnati, November 12-15. Dr. E. Vernon Mastin, St. Louis, Mo., President; C. P. Loranz, Empire Building, Birmingham, Ala., Secretary-Manager.

Southwest Allergy Forum, Houston, April, 1946. Dr. George W. Owen, Jackson, Miss., Temporary President; Dr. A. H. Braden, 1910 Crawford St., Houston, Secretary.

Texas Association of Medical Anesthetists. Dr. E. D. Embree, Houston, President; Dr. R. A. Miller, 1415 Nix Professional Building, San Antonio, Secretary.

Texas Association of Obstetricians and Gynecologists, San Antonio, November 17. Dr. Allen Stewart, Lubbock, President; Dr. Julius McIver, 714 Medical Arts Building, Dallas, Secretary.

Texas Chapter American College of Chest Physicians. Dr. S. E. Thompson, Kerrville, President; Dr. Elliott Mendenhall, Dallas, Secretary.

Texas Club of Internists. Dr. Robert M. Barton, Dallas, President; Dr. Julian C. Barton, 414 Navarro St., San Antonio, Secretary.

Texas Dermatological Society. Dr. Lewis Pipkin, San Antonio, President; Dr. Duncan O. Poth, 1230 Nix Professional Building, San Antonio, Secretary.

Texas Hospital Association, Fort Worth, March 21-23, 1946. Lawrence Payne, Baylor Hospital, Dallas, President; Miss Madelyne Sturdavant, 5709 Velasco, Dallas, Secretary.

Texas Neuropsychiatric Association. Dr. Titus Harris, Galveston, President; Dr. Fred Rogers, Dallas, Secretary.

Texas Ophthalmological and Otolaryngological Society, San Antonio, December 14-15. Dr. M. K. McCullough, Dallas, President; Dr. E. D. Dumas, San Antonio, Secretary.

Texas Orthopedic Society. Dr. E. A. Cayo, San Antonio, President; Dr. Edward Smith, Houston, Secretary.

Texas Pediatric Society, Galveston, November 11-12. Dr. Frank H. Lancaster, Houston, President; Dr. John Ashby, Dallas, Secretary.

Texas Public Health Association. Major Lewis Dodson, C. E., Headquarters Eighth Service Command, Dallas 2, Texas, President.

Texas Radiological Society. Dr. T. B. Bond, Fort Worth, President; Dr. R. P. O'Bannon, 650 Fifth Ave., Fort Worth, Secretary.

Texas Railway and Traumatic Surgical Association. Dr. W. B. Reeves, Greenville, President; Dr. Ross Trigg, First National Bank Building, Fort Worth, Secretary.

Texas Society for Mental Hygiene. Dr. Paul L. Boynton, S. F. A. S. T. C., Nacogdoches, President; Miss Jennie S. Wilmot, University of Texas, Austin, Secretary.

Texas Society of Gastro-enterologists and Proctologists. Dr. James J. Gorman, El Paso, President; Dr. George M. Underwood, 4105 Live Oak Street, Dallas, Secretary.

Texas Society of Pathologists, Dallas, Jan. 27, 1946. Dr. Paul Brindley, Galveston, President; Dr. John J. Andujar, 1300 W. Cannon Ave., Fort Worth, Secretary.

Texas State Heart Association. Dr. Victor E. Schulze, San Angelo, President; Dr. Walter B. Whiting, Wichita Falls, Secretary.

Texas Surgical Society, Temple, April 1-2, 1946. Dr. G. V. Brindley, Temple, President; Dr. Walter Stuck, 1426 Nix Professional Building, San Antonio, Secretary.

Texas Tuberculosis Association. Dr. J. B. White, Amarillo, President; Miss Pansy Nichols, Austin, Executive Secretary.

Third, Panhandle, District Medical Society. Dr. D. D. Cross, Lubbock, President; Dr. George Powers, Amarillo, Acting Secretary.

Fourth District Medical Society, Brownwood, November 7. Dr. V. E. Schulze, San Angelo, President; Dr. H. L. Locker, Brownwood, Secretary.

Fifth and Sixth, Southwest District Society. Dr. Phil A. Bleakney, Harlingen, President; Dr. C. W. Tennison, San Antonio, Secretary.

Seventh, Austin District Society. Dr. Robert B. Morrison, Austin, President; Dr. M. I. Brown, Austin, Secretary.

Eighth, Ninth and Tenth Districts Medical Society. Dr. J. T. Tadlock, Dayton, President; Dr. George W. Waldron, Medical Arts Building, Houston, Secretary.

Eleventh District Society. Dr. C. B. Young, Tyler, President; Dr. J. M. Travis, Jacksonville, Secretary.

Twelfth, Central Texas, District Society. Dr. C. M. Simpson, Temple, President; Dr. R. J. Hanks, Waco, Secretary.

Thirteenth, Northwest, District Society, Fort Worth, November 15. Dr. J. W. Fox, Seymour, President; Dr. Joe R. Wise, 1212 W. Lancaster, Fort Worth, Secretary.

Fourteenth District Society, Dallas, December 11. Dr. W. C. Morrow, Greenville, President; Dr. A. L. Ridings, Sherman, Secretary.

Fifteenth, Northeast Texas, District Society, October, 1946. Dr. Frank Littlejohn, Marshall, President; Dr. Henry H. Niehuss, Greggton, Secretary.

CLINICS

Dallas Southern Clinical Society, Dallas, March 18-21, 1946. Secretary, 433 Medical Arts Building, Dallas 1.

Oklahoma City Clinical Society, Oklahoma City, November 26-29. Mrs. Muriel R. Waller, 512 Medical Arts Building, Oklahoma City 2, Okla., Executive Secretary.

COMMENDATION FOR ARMY MEDICAL LIBRARY TRANSLATION SERVICE

The Chief of Laboratory Service at the Army and Navy General Hospital, Hot Springs, Ark., recently sent a letter of commendation to the Translation Service of the Army Medical Library which stated in part: "In the past I have had private translation work done for me, but in no instance have I ever received material that could approximate the standard of excellence consistently rendered by the Army Medical Library."

Although the Translation Service of the Library has a staff of only three persons, translations can be made in sixteen languages. These include Russian, Rumanian, Serbian, Czechoslovakian, Ukrainian, Turkish, French, German, Norwegian, Swedish, Danish, Italian, Spanish, Portuguese, Dutch and Chinese.

Up to the present, the volume of requests for this service has been so great that it has been limited to the military medical profession only. It is hoped, however, that future expansion will permit the extension of this service to the civilian medical profession as well.—S. G. O. Notes, Aug. 31, 1945.

MEDICAL OFFICERS RETURNING TO TEXAS*

	NAME	Branch of Service	LOCATION Present	LOCATION Former (If Different)	Approximate Date of Release
	Austin-Waller Counties				
1.	Jones, Malcolm A.	Army	Hempstead		Aug., 1945
	Bexar County				
1.	Calvert, Hulon E.	Army	San Antonio		Feb., 1945
2.	Cochran, Joel L.	Army	San Antonio		Aug., 1945
3.	Cooper, Fred B.	Army	San Antonio		Sept., 1945
4.	Cooper, Melbourne J.	Army	San Antonio		Nov., 1945
5.	Goeth, Carl F.	Army	San Antonio		Oct., 1945
6.	Good, Wealty W.	Army	San Antonio		Sept., 1945
7.	Helfer, Lewis M.	Army	San Antonio		July, 1945
8.	Higgins, John Patrick	Army	San Antonio	Stuart, Fla.	1943
9.	Howerton, Ernest E.	Army	San Antonio		Sept., 1945
10.	Kaliski, Sidney	Army	San Antonio		April, 1945
11.	Keating, Peter M.	Army	San Antonio		Sept., 1945
12.	Lehmann, C. Ferd	Army	San Antonio		Aug., 1945
13.	Luedemann, Waldo S.	Army	San Antonio		March, 1943
14.	McPeak, Edgar M.	Army	San Antonio		June, 1945
15.	Matthews, John L.	Army	San Antonio		Oct., 1945
16.	Mayes, Lee P.	Army	San Antonio		Dec., 1944
17.	Meddis, Victor N.	Army	San Antonio		July, 1943
18.	Rhea, Robert L., Jr.	Army	San Antonio		Sept., 1945
19.	Rogers, Albert M.	Army	San Antonio		Sept., 1945
20.	Slayter, James E.	Navy	San Antonio		March, 1944
21.	Thomas, Robert P., Jr.	Army	San Antonio		June, 1944
22.	Weiss, Victor J.	Navy	San Antonio		Nov., 1944
	Brazos-Robertson Counties				
1.	Grant, Richard B., Jr.	Army	Bryan		April, 1945
	Brooks-Duval-Jim Wells Counties				
1.	Appell, M. H.		Alice		Sept., 1945
2.	Behrns, C. L.	Army	Alice		Sept., 1945
3.	Gonzales, J. C., Jr.	Army	Benavides		Oct., 1945
4.	Moet, John Allen	Army	Orange Grove		July, 1945
5.	Strickland, John H.		Alice		Sept., 1945
	Brown-Comanche-Mills-San-Saba Counties				
1.	Locker, Braswell	Army	U. of T., Galveston	Brownwood	Oct., 1945
2.	Mayo, O. N.	Army	Brownwood		Oct., 1945
	Cameron-Willacy Counties				
1.	Haas, Nelson W.	Army	San Benito	Buffalo, N. Y.	Oct., 1945
2.	Para, Andrew W.			Brownsville	Feb., 1945
	Dallas County				
1.	Allamon, Emmett L.	Army	Dallas		Sept., 1945
2.	Barr, William Thomas		Dallas		
3.	Beaver, Norman Blaine	Army	Dallas		
4.	Bussey, Charles D.	Army	Dallas		
5.	Carpenter, Robert Garland	Army	Dallas		Oct., 1943
6.	Carter, Christopher Bennett	Army	Dallas		
7.	Galt, Sidney		Dallas		
8.	Knickerbocker, Bruce Alexander		Dallas		
9.	Lively, William M.			Dallas	July, 1945
10.	Moore, Robert Leslie		Dallas		
11.	Patterson, Casey E.	Army	Dallas		Oct., 1945
12.	Peyton, John Bailey		Dallas		
13.	Rosenthal, Raoul Simon		Dallas		
14.	Schenewerk, George Augustus		Dallas		
15.	Sebastian, F. J.	Army	Dallas		Jan., 1946
16.	Shaw, Robert Roeder		Dallas		
17.	Smith, Louis Weir		Dallas		
18.	Trumbull, Robert Augustus		Dallas		
19.	Walker, Price Mars		Dallas		
20.	Woods, Ozro Theo	USPHS	Dallas		

*EDITOR'S NOTE: This list is the first of a series in which it is hoped to name all those physicians who have been in the Armed Forces during the war just past and have now returned to Texas to resume civilian practice. The information in this list has been assembled from a variety of sources. While an attempt has been made to secure as complete and as accurate data as possible, we are aware that omissions and errors have been made. Not only for publication in the JOURNAL, but also for the permanent records in the central office of the State Medical Association, we invite and urge correction of and addition to the material here submitted.

	NAME	Branch of Service	LOCATION Present	LOCATION Former (If Different)	Approximate Date of Release
	Denton County				
1.	Miller, Walter S., Jr.	Army	Denton	Laredo	Sept., 1945
	DeWitt County				
1.	Prather, Frank A.	Army	Cuero	Runge	Aug., 1945
2.	Richter, Louis B.			Yoakum	Jan., 1943
	Ector-Midland-Martin-Howard-Andrews-Glasscock Counties				
1.	Hopper, John J.	Army	Stanton		Sept., 1945
	Ellis County				
1.	Jeter, J. R.	Army	Ennis		Nov., 1945
	El Paso County				
1.	Peticolas, John D.			El Paso	Feb., 1945
	Erath-Hood-Somervell Counties				
1.	Pate, Joe J.	Army	Dublin	Paducah	Sept., 1945
	Falls County				
1.	Bennett, Alfred C., Jr.	Army	Marlin		June, 1945
	Fayette County				
1.	Boelsche, Leslie D.	Army	La Grange		July, 1943
	Gregg County				
1.	Farrar, William P.	Army	Longview		July, 1945
2.	Khoury, Sam G.			Longview	Feb., 1945
3.	Leake, Bain	Army	Gladewater		May, 1945
4.	Moser, E. R.	Army	Longview		Oct., 1945
5.	Rushing, Garland S.		Longview		
	Grimes County				
1.	Ketchum, E. T.	Army	Navasota		Aug., 1945
	Hamilton County				
1.	Kooken, R. A.	Army	Hamilton		Sept., 1945
	Harris County				
1.	Adam, George F.	Army	Houston		Oct., 1945
2.	Alexander, Charles S.	Army	Houston		Dec., 1943
3.	Alexander, J. C.	Army	Houston		Sept., 1945
4.	Barnes, J. P.	Army	Houston		April, 1944
5.	Bayer, B. H.	Army	Houston		April, 1942
6.	Burg, Abner D.	Army	Houston		Oct., 1941
7.	Butaud, Russell S.	Army	Houston		Oct., 1945
8.	Carrico, Carl C.	Army	Houston		Oct., 1945
9.	Cohen, Raymond	Army	Houston		Oct., 1945
10.	Conte, Ralph	Army	Houston		Oct., 1945
11.	Dwyer, Charles A.	Navy	Houston		June, 1945
12.	Eidman, F. G.	Army	Houston		Oct., 1945
13.	Farfel, Bernard	Army	Houston		Dec., 1942
14.	Flynt, Otis P.	Navy	Houston		June, 1943
15.	Gandy, D. Truett	Army	Houston		1943
16.	Gonzales, Angel G.	Army	Houston		1943
17.	Hancock, L. D.	Army	Houston		Dec., 1943
18.	Hannon, T. R.	Army	Houston		Feb., 1944
19.	Harris, J. W.	Army	Houston		1943
20.	Hild, Jack R.	Army	Houston		Sept., 1945
21.	Hooker, Lyle	Army	Houston		1942
22.	Johnson, R. M.	Army	Houston		Sept., 1945
23.	Jorns, C. Forrest	Army	Houston		Oct., 1945
24.	Kalb, T. W.	Army	Houston		April, 1943
25.	Lerner, Ben L.	Army	Houston		Sept., 1945
26.	McKeever, Duncan C.	Navy	Houston		Sept., 1945
27.	Marshall, R. M.	Army	Houston		Sept., 1945
28.	Osborne, Clarence F.	Army	Pasadena		
29.	Peterson, Carl A.	Army	Houston		1944
30.	Phillips, Elliott S.	Army	Houston		
31.	Robinett, James B., Jr.	Army	Houston		Sept.,1945
32.	Schaffer, Elliott	Army	Houston		
33.	Schnur, Sidney	Army	Houston		Aug., 1945
34.	Schultz, Jacob F.	Army	Houston		Dec., 1944
35.	Scott, Dan W.	Army	Houston		1944
36.	Seale, Everett R.	Army	Houston		Sept., 1945

	NAME	Branch of Service	LOCATION Present	LOCATION Former (If Different)	Approximate Date of Release
	Harris County—Continued				
37.	Sears, Earnest S.	Army	Houston		Oct., 1945
38.	Spezia, Joseph L.	Army	Houston		Sept., 1945
39.	Stalnaker, Paul R.	Navy	Houston		
40.	Taubenhaus, L. J.	Navy	Houston		Oct., 1945
41.	Turner, C. Gary	Navy	Houston		Sept., 1945
42.	Weil, Sol B.	Army	Houston		Dec., 1943
43.	Whittsitt, J. J.	Army	Houston		Aug., 1945
44.	Wilkerson, E. A.	Army	Houston		Sept., 1945
45.	Wolf, E. Trowbridge	Army	Houston		1944
	Hidalgo-Starr Counties				
1.	Guerra, Gilberto A.	Army	Edinburg		Sept., 1945
	Hill County				
1.	McPherson, Garland		Lovelace	Hillsboro	1944
2.	Smith, Nellins C.	Army	Hillsboro		
3.	Zacharias, O. G.		Topeka, Kan.	Hillsboro	1944
	Jefferson County				
1.	Bevil, Lamar	Army	Beaumont		Sept., 1945
2.	Colby, Fred	Army	Beaumont		Jan., 1945
3.	Fears, T. A.	Navy	Beaumont		Oct., 1945
4.	Hart, J. A.	Army	Beaumont		March, 1945
5.	Knight, Max J.	Navy	Port Arthur		Dec., 1943
6.	Meyer, Paul R.	Army	Port Arthur		Jan., 1945
7.	Pecora, T. L.	Army	Beaumont		Sept., 1945
8.	Pierson, Rogers	Navy	Beaumont		Nov., 1944
9.	Sladczyk, George	Army	Port Arthur		Sept., 1945
10.	Sutton, Fred W.			Beaumont	Feb., 1943
	Johnson County				
1.	Pickens, J. W.	Army	Cleburne		July, 1945
2.	Whitehouse, William R.	Army	Cleburne	New Orleans, La.	1943
3.	Yater, Tolbert F.		Cleburne		Aug., 1945
	Lampasas-Burnet-Llano Counties				
1.	Allen, George S.		Burnet		Nov., 1945
	La Salle-Frio-Dimmitt Counties				
1.	Crawford, John McC.	Army	Carrizo Springs		Sept., 1945
	Limestone County				
1.	Strode, Willard L.	Navy	Groesbeck	Waco	Dec., 1943
	Lubbock-Crosby Counties				
1.	Benson, M. H.	Navy	Lubbock		May, 1945
2.	Canon, Robert T.	Navy	Lubbock		March, 1945
3.	English, Otis W.	Army	Lubbock		Sept., 1943
4.	Hutchinson, Ben B.	Army	Lubbock		Oct., 1945
5.	Jacobson, Harry		Post		
	McLennan County				
1.	Carlisle, M. C.	Army	Waco		Sept., 1945
2.	Oliver, Tom	Army	Waco		Sept., 1945
3.	Sadler, Leslie	Army	Waco		Sept., 1945
	Navarro County				
1.	Sneed, William R.			Corsicana	March, 1945
	Nueces County				
1.	Concklin, Charles Louis	Army	Corpus Christi		Sept., 1945
2.	Heaney, Gordon	Army	Corpus Christi		Sept., 1945
3.	Hoffpauir, Alvin C.			Corpus Christi	March, 1945
4.	Merriman, George J.	Army	Corpus Christi		Sept., 1945
5.	Moody, Foy	Army	Corpus Christi		Sept., 1945
	Palo Pinto-Parker Counties				
1.	Pedigo, Paul C.			Strawn	March, 1944
	Potter County				
1.	Aronson, Samuel J.	Army	Amarillo		Nov., 1944
2.	Duncan, Frank B.	Army	Amarillo		Sept., 1945
3.	Johnson, Jere B.	Army	Amarillo	Pampa	Sept., 1945
4.	Latson, Harvey H.	Army	Amarillo		Aug., 1945

NAME	Branch of Service	LOCATION Present	LOCATION Former (If Different)	Approximate Date of Release
Potter County—Continued				
5. Patton, David M.	Army	Amarillo		Feb., 1943
6. Royce, George T.	Navy	Amarillo		Oct., 1945
Rusk County				
1. Burns, Coleman C.			Henderson	July, 1945
San Patricio-Aransas-Refugio Counties				
1. Glover, George E.			Austwell	May, 1943
Scurry-Dickens-Kent-Garza-Borden-King-Stonewall Counties				
1. Wallace, Grady M.	USPHS	Snyder		
Tarrant County				
1. Duncan, Robert W.	Army	Fort Worth		Sept., 1945
2. Garnett, John W., Jr.	Army	Fort Worth		Oct., 1945
3. Harkins, Thomas A., Jr.			Fort Worth	June, 1945
4. McKee, Robert D.	Army	Fort Worth		Sept., 1945
5. Marquart, Philip B.			Fort Worth	June, 1945
Taylor-Jones Counties				
1. Thurman, George D.			Abilene	May, 1943
Tom Green-Coke-Crockett-Concho-Irion-Sterling-Sutton-Schleicher Counties				
1. Mitchell, William Grady			San Angelo	April, 1945
2. Tandy, H. B.	Army	Ozona		Oct., 1945
Travis County				
1. Henry, Harvey B.			Austin	
Webb-Zapata-Jim Hogg Counties				
1. Hicks, Yale			Laredo	July, 1945
Wichita County				
1. Adams, Walter B., Jr.	Army	Wichita Falls		Sept., 1945

A REPORT ON CERTAIN BILLS PENDING BEFORE CONGRESS*

Wagner-Murray-Dingell Bill (S. 1050).—The Senate bill is still with the Committee on Finance, while the House bill is with the Committee on Ways and Means. Neither Committee has manifested any intention of early consideration of the bills, but Senator Wagner says he expects to have hearings upon his bill held in the near future.

Hill-Burton Hospital Bill (S. 191).—The subcommittee of the Senate Committee on Labor and Education has rewritten S. 191 and reported it out to the Full Committee a week ago. Today the Full Committee *reported it to the floor of the Senate.* Among the important features of the bill are:

1. Instead of appropriating $100,000,000 for construction for the fiscal year ending June 30, 1946, the new bill provides $75,000,000 each year for the first five years beginning the fiscal year of 1947.
2. The formula for allotment to states has been changed so that allotments will range from 33.3 per cent to the most wealthy states to 75 per cent for the poorest.
3. The Surgeon General (U. S. P. H. S.) is instructed to prepare within six months, with the approval of the Federal Advisory Council and the Administrator, general regulations with regard to the
   a. Number of general hospital beds that may be constructed in any specific area.
   b. Specialized hospital beds.
   c. Number and distribution of public health centers.
   d. General manner of determining priority of projects.
   e. General standards of construction and equipment.
   f. Prevention of discrimination on account of race, creed, or color.
4. Ten specific instructions are outlined for preparation of plans by the States. Briefly stated they are:
   a. Designate a single agency to administer or supervise administration of the plan.
   b. Show that this agency will have authority to carry out the plan.
   c. Provide for an advisory council to consult with the agency.
   d. Set forth a hospital construction program to be based on a survey of needs.
   e. Set forth the relative need for projects and provide for their construction.
   f. Provide methods of administering the plan.
   g. Provide minimum standards for maintenance and operation of hospitals which receive federal aid under this title.
   h. Provide for an opportunity for a hearing before the agency to every applicant for a construction project.
   i. Provide that the agency make such reports from time to time as the Surgeon General

*Editor's Note.—The report given here is information contained in Bulletin No. 21, issued October 27, 1945, by J. S. Lawrence, M. D., Director of the Washington Office of the Council on Medical Service and Public Relations of the American Medical Association. Members writing their Congressmen regarding medical legislation pending in Congress are urged to send copies of their letters to Dr. Lawrence, whose address is 900 Columbia Medical Building, 1835 I Street, N. W., Washington 6, D. C.

may require and give him, upon demand, access to the records upon which such information is based.

j. Provide that the agency will from time to time review its hospital construction program and submit to the Surgeon General modifications it deems necessary.

5. The definition of public health center is modified by limiting it to the provision of "public health services." The original bill had provided "medical care" as well.

National Research Foundation Bill (S. 1297, S. 1285, and S. 1248).—The three Senate bills, S. 1297, S. 1285, and S. 1248 authorizing the creation and financial support by the federal government of a national research foundation are being considered by the subcommittee of the Committee on Military Affairs. Hearings have been held for the last two weeks, and it is reported they will extend over another week or ten days. Members of the subcommittee are Senators Kilgore, West Virginia, Chairman; Thomas, Utah; Johnson, Colorado; Murray, Montana; Revercomb, West Virginia; Wilson, Iowa.

Among those who have appeared before the Committee are representatives of the Army, Navy, Departments of Agriculture, Commerce, Interior, Public Health Service; Bureau of the Budget; Presidents and representatives of colleges and universities; and representatives of large industries conducting scientific departments. Dr. Fishbein represented the American Medical Association. Dr. Vannevar Bush whose report "Science, The Endless Frontier" formed a basis of the bill, was a witness. That the government should stimulate research and assist with appropriations is unanimously agreed, but there is a difference of opinion as to how the government shall be related to the work. Some recommend that there be created by the President a board of prominent scientists who shall select a director, but he shall not have the power of veto. Others recommend that the President appoint a director and a board, giving the director full authority. Still others suggest that there shall be two boards, a scientific board and an administrative board, and the director should be over the administrative board. Difficulty in separating fundamental, basic, or curiosity scientific research from applied scientific research complicates the problem of administration. The hearings, when printed, will form a very valuable report.

Social Welfare Department (H. Res. 45).—Congressman Kelley, Pennsylvania, has been studying the problems of the physically handicapped for more than a year, and a committee is preparing to submit a report in which it will very likely recommend that inasmuch as the problem is a continuing one, it should be undertaken by a new department with cabinet representation under which should be collected the various agencies, seventy federal, and hundreds of state and local agencies, currently working independently in this field.

Investigation has shown that probably half of the states have inadequate facilities for rehabilitating the handicapped, and the Committee may recommend a program of federal assistance. This Committee has from time to time printed minutes of the hearings it has been holding. Members of the Committee are: Congressmen Kelley, Pennsylvania, Chairman; Adams, New Hampshire; Green, Pennsylvania; Welch, California; Patterson, California; Randolph, West Virginia; Baldwin, New York.

Maternal Welfare (S. 1318).—Senator Pepper has not returned from his trip abroad as yet, but is expected before the end of the month. He announces that hearings will be held on the bill sometime this year. In the meantime he is inviting a group of key people to give him their opinions as to the merits of the bill.

OFFICE SHORTAGE FOR RETURNING MEDICAL OFFICERS

To relieve the present shortage of available office space, practicing physicians are urged to share their offices with doctors who are returning from service.

An editorial appearing in the September 29 issue of *The Journal of the American Medical Association* said: "In large communities, such as cities of over 100,000 population, the problem is apparently far more serious than in the smaller areas. In some larger cities physicians are even remodeling old houses into office space. . . . Many a physician whose office is not fully utilized either in the morning or in the afternoon or even in the evening can make available time and space, as well as the use of his own facilities. . . . The least that can be done for such veterans is to make available to them an opportunity to begin the earning of a livelihood at the earliest possible moment."

HOSPITALS NEEDING INTERNS AND RESIDENTS

Methodist Hospital, Dallas. Capacity 206 beds. C. W. Sensenbach, M. D., Medical Director; (4 interns now).

Nix Hospital, San Antonio. Capacity 145; admissions 5,564. Ellen Louise Brient, R. N., Superintendent (1 intern).

St. Paul Hospital, Dallas. Capacity 270 beds. C. W. Sensenbach, M. D., Medical Director (1 intern now).

PLASTIC ARTIFICIAL EYES

Thirty installations, twenty-nine general hospitals and one regional hospital, have been designated plastic eye centers for the Army Medical Department. "There is no existing backlog for plastic eyes and it is not contemplated that any more centers will be opened," said Major Trygve Gundersen, M. C., Chief Consultant in Ophthalmology to Major General Norman T. Kirk, the Surgeon General.

All existing laboratories have adequate space, personnel, and supplies, with the exception of one general hospital, and action is being taken to expand the facilities so that production can be increased at this establishment.

As of June 30, 1945, approximately 5,100 plastic artificial eyes have been made and fitted. In addition, the plastic eye laboratories have made conformers, eye spheres, and other appliances for the eye clinics.

Experimental work is still being carried on in the plastic artificial eye program. Technicians are continually endeavoring to improve and give these plastic eyes greater mobility and to lessen abrasion.

Three teams of officers and enlisted men who are experienced in making plastic artificial eyes are overseas, and four additional teams are now being trained in this work.—S. G. O. Notes, Aug. 15, 1945.

FACTS ON USE OF DDT

Since the proper use of DDT requires special knowledge and training, a bulletin has been published as a technical guide for the Army to its safe and efficient use, Major General Norman T. Kirk, Surgeon General of the Army, has announced. The publication contains information on the precautions to be taken in handling DDT, its mode of action in insect control, and the proper methods of application of the DDT insecticide items issued by the Army.

It is emphasized that, although DDT may be safely handled as an insecticide, it is, nevertheless, a toxic material. Poisoning may occur from ingestion of DDT or by absorption of DDT solutions through the skin. DDT powder and areosols are not absorbed

through the skin, and have been found to produce no ill effects when inhaled in small amounts. However, in conditions where air currents do not carry away the dust from the user, it is wise to wear suitable respirators as protection against excessive inhalation.

DDT acts on insects both as a contact poison and as a stomach poison. Studies have shown that the poisonous effect of DDT on mosquito larvae is fully as powerful as that on the adult insect, although on some other insects, such as flies, the larvae are not equally affected by the insecticide. In applying DDT as a mosquito larvicide to open water receptacles, a prolonged effect may be obtained because of the residual action of the chemical. However, in applying it to natural water bodies the effect is much shorter, due to the binding action of mud in the water, which apparently checks the effectiveness of DDT. It should also be considered that amounts of DDT greater than 0.2 pound per acre may prove fatal to fish and wild life. For extermination of insects such as ants, roaches, fleas, bedbugs, and flies, DDT oil solution or powder should be used, with particular attention to cracks, holes, and seams in walls, floors, and bedding, as indicated. One of the most valuable characteristics of DDT lies in its tendency to remain deadly to insects over a prolonged period of time. In applying DDT solutions to walls and other large surface areas, a coarse spray is usually employed, but in applying it to screens or mesh surfaces, ordinary paint brushes may be used. Although the effectiveness of the treated areas against insects persists for some time, the insects which come in contact with the chemical may not die until an hour or more has elapsed, and immediate death should not be expected.

When applying solutions of DDT in kerosene, precautions concerning the inflammability of the kerosene should be observed. Care should be taken to keep electric motors and other sparking or heating apparatus from the zone of spray. No open fires or smoking should be permitted until the spray has dried and ventilation is complete. The kerosene in the solution is harmful to rubber equipment and may cause mild skin irritation when in contact with the skin.

Thanks to the magic properties of DDT, many lives have been saved in this war and much disease prevented. Extermination of disease-carrying insects has reduced the incidence of typhus, malaria, and other ravaging diseases of the war areas.

Although rapid progress has been made in the development of DDT since it first made its appearance in the field of science, much remains to be learned before its full potentialities in insect control can be realized. Signs of progress are evident in the spraying of large areas by aircraft, the mass delousing of communities in Europe, and the better methods of manufacture. Investigation is continuing on every aspect of DDT, however, in search of new and extensive improvements in everything from its chemical beginning to its final application in the field.—S. G. O. Notes, Sept. 15, 1945.

ASSAILS EXAMINATION OF AIR PILOTS

"Experience in the medicine of aviation in the United States before the war led experts who are members of the Aero Medical Association and of the medical division of the Civil Aeronautics Administration to establish high standards of qualifications for the examination of airplane pilots," says an editorial in the September 1 issue of *The Journal of the American Medical Association*. "On June 1 the Civil Aeronautics Administration cut the examination of private and student pilots to a minimum. Previously only qualified examiners were permitted to make such examinations. Now the examinations may be made not only by general practitioners but even by osteopaths who happen to be licensed to practice medicine in any of the states. This reversal of policy is so fraught with danger to the flying public and to the millions of persons who will be hazarding their lives in flight in the postwar period that experienced examiners now qualified particularly in this field threaten to discontinue their connection with the CAA. The Congress of the United States has placed on the CAA the duty of regulating and controlling aviation so as to 'assure the highest degree of safety.' By this backward step a federal agency is apparently permitting selfish and political pressure to force on it a disregard of the high obligation committed to it by the Congress."

PENICILLIN IN LUNG INFECTIONS

Penicillin cannot serve as a substitute for surgery in the treatment of empyema, J. Karl Poppe, M. D., of the Department of Surgery, Washington University School of Medicine, St. Louis, declares.

Writing in the October 6 issue of *The Journal of the American Medical Association*, Dr. Poppe, who is also associated with Barnes Hospital, says that in the early stages of the infection, penicillin may be effective but to "use penicillin to avoid drainage of . . . pus appears to represent poor judgment and undue optimism."

Although the author believes there is a possibility of arresting the infection over a period of months with large doses of penicillin, he points out that this can be done only at great expense to the patient. Moreover, there is a tendency toward an unsatisfactory result in such treatment, he said.

According to Dr. Poppe's experience with penicillin in over 150 lung cases of all types, the best treatment is to use penicillin extensively during the first two or three weeks after the onset of the infection in an attempt to prevent the development of empyema. If this fails, penicillin cannot take the place of drainage by surgery. The pus in the chest cavity must be drained if it has accumulated and damaged tissue must be cut away.

PAIN NATURE'S DANGER SIGNAL

Pain is probably the greatest and most important protective mechanism with which Nature has endowed mankind, according to the October issue of *Hygeia*, health magazine of the American Medical Association.

Dr. Rees Jensen, M. D., of New York, says that there "are 44 sites of pain which must be considered when disease is present in one of the structures within the abdominal cavity."

After considering some of the different pain signals which each disease sends through the body, the author believes that Nature has failed so far as cancer of the stomach or intestinal tract is concerned because these diseases can begin their growth without any pain being present in the early stages.

EASIER ACCESS TO PUBLIC BUILDINGS URGED FOR HANDICAPPED PERSONS

A recently inaugurated campaign by the National Society for Crippled Children and Adults to construct new public buildings with ground level entries, elevators between floors, and the elimination of all unnecessary steps should help to "decrease the number of accidents among the handicapped as well as greatly increase their ability to perform business activities and seek pleasure with greater frequency and ease," says the August 18 issue of *The Journal of the American Medical Association*.

"This society," *The Journal* says, "also urges the

remodeling of existing buildings with long flights of stairs to provide ground level entries, elevators, ramps, and other practicable measures aimed at the elimination or amelioration of impediments to ready access. Patients with heart disease, crippling illnesses, missing limbs, or other disorders of locomotion form an increasing proportion of the population, both because of the war and because of the lengthened average age."

SIX PROJECTS FOR IMPROVEMENT OF ARTIFICIAL LIMBS

An intensified program for the improvement of artificial limbs which involves six separate projects will be undertaken by the Army in coördination with the National Research Council, according to an announcement by Major General Norman T. Kirk, Surgeon General of the Army.

In February of this year the National Research Council through its Committee on Prosthetic Devices, which comprises some of the country's outstanding scientists, started work on the problem of providing better arms and legs for amputees. Coöperating with this committee are the Veterans Administration, Navy, Army, National Bureau of Standards, Federal Security Agency, and engineers from some of the nation's top industrial concerns.

The research activities of the Committee on Prosthetic Devices will continue along the same lines but the Army will give further coöperation in certain additional phases of the program. The plan of Army scientists is to complement what is being carried on under the National Research Council auspices.

The Army will conduct its research work at Army General Hospitals which are amputation centers. The presence in these hospitals of orthopedic surgeons who are handling these amputation cases and the clinical evaluation possible under such circumstances is expected to prove of definite value.

The aim of both projects is the general improvement in the quality of artificial limbs, more standardization of parts and the facilitation of production and fitting.

The six phases of the program in which the Army will devote its efforts include:

1. Further development and improvement of knee assembly and ankle assembly.
2. Investigation of materials for producing a cosmetic hand or for covering a mechanical hand.
3. Evaluation of usefulness of plastics in sockets or limb sections.
4. Broad study of metals and alloys used in fabrication of artificial limbs.
5. Investigation of fabrics and techniques of manufacture and fitting for prostheses at or below the ankle.
6. Production of a motion picture record of the Army amputation and prosthetic program.

Private industry will play an important part in this program. The Committee on Prosthetic Devices of the National Research Council contracts with individual concerns for basic research which is carried on in the laboratories of the company contracted.

Northrup Aviation Company in California has done an outstanding piece of work in the improvement of a rotary wrist mechanism which gives an arm amputee far better use of the artificial hand. This work has been done in collaboration with Bushnell General Hospital at Brigham City, Utah. The government authorizes payment for all expenses under these contracts and the Army through its amputation centers will afford every possible means of coöperation. The War Department hopes to broaden this aspect of the project by enlisting the help of more industrial concerns which have the laboratory facilities to engage in such work.

An appropriation has been authorized sufficient to continue this Army project as long as The Surgeon General expects to have amputee cases in Army General Hospitals. There have been about 14,000 amputees in Army General Hospitals in this country since the beginning of this war. Of this total there are now about 8,300 amputees who are in the six amputation centers in Army General Hospitals. Five per cent of these cases represent battle veterans who have two arms or legs or one arm and one leg, nine are triple amputees, and only two men have lost both hands and both feet. Approximately 95 per cent are men who have suffered the loss of one limb. —S. G. O. Notes, Sept. 30, 1945.

SURGEON GENERAL URGES PROMPT RELEASE OF ELIGIBLE PERSONNEL

Major General Norman T. Kirk, the Surgeon General of the Army, expressed the desire that all commanding officers give the fullest possible cooperaton towards effecting the early release of Medical Department personnel who are eligible for separation from the service under the announced policy.

At the same time he urged that all Medical Department personnel occupying key positions and who are eligible for separation under the present criteria volunteer to continue on active duty to assist in maintaining the present high standards of medical care if no replacement is immediately available. It is contemplated that a period of six months' duty will be sufficient time to allow for the arrival of a replacement or for training an officer to take over duties of key positions and thus allow all officers eligible for release to be returned to civilian life.

General Kirk requested that commanding officers make every effort to obtain replacements for Medical Department personnel eligible for release in order that those officers might be returned to civil life at the earliest possible moment.

Under the announced Medical Department demobilization policy Medical and Dental Corps officers are eligible for release providing they meet any one of the following criteria:

a. Adjusted service score of 80 or above.

b. 48 years of age to the nearest birthday or above.

c. Entry on active duty prior to Pearl Harbor excepting critical specialists qualified in eye, ear, nose, and throat, plastic surgery, orthopedic surgery, neuropsychiatry, or laboratory clinicians. Officers qualified in these specialties are eligible for release if they entered on active duty prior to January 1, 1941, or if they meet the criteria on points or age.

This revised policy on separation is expected to return 13,000 physicians, 3,500 dentists, 25,000 nurses, and a large number of other Medical Department officers to civilian life by the first of the year.

It will be necessary to retain a large number of low score men in the service for replacement for overseas men having high ASR scores. Other low score men must of necessity be retained in the service to carry on the necessary activities of the Medical Department in this country and in theaters where American troops are operating.

It is intended that no one eligible for release will be held in the Army because there are men with higher scores overseas who have not been returned home. Eligible men will be discharged as rapidly as they can be processed for separation.

No enlisted personnel with a sufficient number of critical points will be kept because of "military necessity" except those very few men classified in one of three essential technical skills. These are: orthopedic mechanics, electroencephalographers who operate electrocardiac equipment, and radio trans-

mitter attendants. The latter is not in the Medical Department.—S. G. O. Notes, Sept. 30, 1945.

NEUROPSYCHIATRIC DISCHARGES IN ARMY

The nation's total of soldiers who have been discharged from the Army for neuropsychiatric reasons has now reached 315,000, Brigadier General William C. Menninger, Director of the Neuropsychiatry Consultants Division of the Army Medical Department, said in a recent talk before the New York Academy of Medicine. Describing this problem as a "post war challenge to medicine," General Menninger expressed the hope that "physicians will prepare themselves to accept and treat what the Army medical officers discovered were among their biggest problems—the emotional factors in the production of illness." "With this understanding on the part of the physician," General Menninger said, "treatment must be directed towards integrating the individual into his pre-war identifications and satisfactions."

On the basis of the Army's experience with neuropsychiatric cases, which are referred to as combat exhaustion or combat fatigue, only about 3 to 5 per cent of the soldiers suffered reactions due entirely to fatigue. The condition of the great majority was primarily a personality disturbance and treated as such, he explained.

Upon induction into the Army a soldier faces an entirely different life which in certain cases produces sufficient stress in the individual to bring him to the psychiatric breaking point. "Frustration," General Menninger pointed out, "was a daily part of the soldier's life, sometimes in the form of waiting days, weeks, months, sometimes in the deprivation of essential supplies. Confusion was routine in his life and the noise and whistles and flares of battle are beyond the imagination of anyone who has not heard and seen them." General Menninger said that essentially the response is the same when an individual fails to adjust himself to his situation in civilian life as it is when he finds he cannot meet the demands of Army life.—S. G. O. Notes, Sept. 30, 1945.

STREPTOMYCIN PRODUCTION

The War Department announces that streptomycin, the new wonder sister drug to penicillin, is being used in thirty Army general hospitals over the country, but that it is so difficult to obtain that the total output of the four companies now making it has been only fourteen ounces a month.

Major General Norman T. Kirk, Surgeon General of the Army, said the Army was receiving many requests for the drug for use in treatment of urinary and other infections caused by gram-negative bacteria which do not respond to penicillin, but that these cannot be met since the Army neither controls the supply nor can get enough for its own needs in treatment of battle-wounded soldiers. General Kirk said that the four companies, Merck, Upjohn, Abbott, and Squibb, were the principal manufacturers of the new product, but that other concerns were working at experimental production at pilot plants and that any civilian request for streptomycin naturally would go to these companies.

"The Army and Navy are purchasing only a part of available production," General Kirk said. "In August, twenty-eight ounces—or 800,000,000 units—were purchased. Joint Army-Navy expectations for September are 162 ounces, but it is anticipated that production will be not more than 70 ounces. It is hoped that Army-Navy procurement can be doubled in October, for military needs alone now are about 2,000 ounces a month."

A gram, or 1,000,000 units is the standard daily dose administered in three injections over a twenty-four hour period. Production is limited severely because the drug is obtained from a natural fungus found in the soil and must be grown under carefully controlled laboratory conditions which cannot be hurried. The phenomenal production of penicillin which brought it from a laboratory curiosity to a commonly-used drug and the price from astronomical figures to about a dollar a dose was due in part to pressure of wartime needs, the General pointed out. "But," he added, "with the war ended and priorities a thing of the past, streptomycin does not have these advantages, thus working to some extent to hamper production, although industry is doing what it can do to supply the demand."

General Kirk explained that the Army's principal needs are for treatment of soldiers with severed spinal cords who develop urinary tract infections because of a loss of bladder function, and to some extent in treating some cases of meningitis and other infections which do not respond readily to penicillin therapy.—S. G. O. Notes, Sept. 30, 1945.

LIBRARY NOTES

The package library consists of collections of reprints and other periodical material on various subjects, prepared for lending to members of the Association. Requests for packages should be addressed "Library, State Medical Association of Texas, 1404 W. El Paso Street, Fort Worth 3, Texas." Twenty-five cents in stamps should be enclosed with the request to cover postage and part of the expense of collecting the material. Only one package may be borrowed at a time, and packages are allowed to remain in the hands of the borrower for 14 days.

Package Service

Packages were mailed from the Library of the State Medical Association to the following during October:

Dr. H. V. Hedges, Hico—*Hospital Plans* (8 articles).

Dr. E. D. McDonald, Santa Anna—*Granulocytopenia* (13 articles).

Dr. J. R. Nicholson, San Antonio—*Colitis* (14 articles).

Dr. C. I. Shult, Columbus—*Kidneys, cysts* (9 articles).

Southwestern Medical College Library, Dallas—(1 journal).

Dr. J. M. Woodall, Big Spring—(1 journal).

Dr. W. Ray Hanna, Sulphur Springs—*Insulin, therapy* (4 articles).

Lt. Col. Albert M. Schwartz, Waco—(1 book).

Dr. R. L. Johnson, Pittsburg—*Blood, groups* (15 articles).

Dr. W. T. Sadler, Merkel—*Rheumatic Fever* (24 articles).

Dr. L. O. Dutton, El Paso—(3 journals).

Mrs. G. T. Moller, Corpus Christi—*Economics, medical service plans* (17 articles).

Dr. E. J. Tucker, Liberty—*Bones, transplantation* (15 articles).

Dr. John L. Dean, Crockett—*Heart, diseases* (9 articles).

Gondolf Laboratory, Austin—(3 journals).

Dr. M. L. Hutcheson, Denton—*Ear, diseases* (13 articles).

Dr. C. H. Frank, Texarkana—*Cancer, pain in* (15 articles).

Dr. Ernestine Smith, Amarillo—*Erythroblastosis, fetal* (19 articles).

Dr. Oscar Huff, Pampa—*Goiter, therapy* (15 articles).

Dr. A. W. Hinchman, Brady—*Dermatitis* (21 articles).

Dr. L. B. Holland, Wichita Falls—*Sclerosis, disseminated* (12 articles).

Dr. Robert L. McCarty, Lubbock—*Thromboangiitis, obliterans* (16 articles).

Dr. M. A. Walker, Jr., Paris—*Blood, groups* (12 articles); *Anesthesia, in gynecology and obstetrics* (19 articles); *Infants, feeding* (16 articles).

Dr. Frank C. Hodges, Abilene—*Fractures, therapy* (14 articles).

ACCESSIONS

New York, The Macmillan Company—Quigley: Plaster of Paris Technique in the Treatment of Fractures and other Injuries.

Chicago, The Year Book Publishers—Caffey: Pediatric X-Ray Diagnosis; Archer: The Osseous System.

Springfield, Chas. C. Thomas, Publisher—Major: Classic Descriptions of Disease, ed. 3.

SUMMARY

REPRINTS RECEIVED, 518	LOCAL USERS, 31
JOURNALS RECEIVED, 186	BORROWERS BY MAIL, 24
ITEMS CONSULTED, 147	PACKAGES MAILED, 26
ITEMS TAKEN OUT, 92	ITEMS MAILED, 309

TOTAL ITEMS CONSULTED AND LOANED, 548

MOTION PICTURE LENDING LIBRARY

Motion picture films on medical subjects, 16 mm., both silent and sound, some in color, and suitable for either medical or lay audiences, are available for loan to county medical societies, hospital staffs, or individual physicians, on request. Borrowers will be required to pay only the cost of shipment of the films, by express, with insurance, and for any damage to films while in the hands of the borrower.

Requests for films should be addressed to "Motion Picture Lending Library, State Medical Association of Texas, 1404 West El Paso Street, Fort Worth 3, Texas." A list of available films, with descriptions, will be furnished on request.

MOTION PICTURE LENDING LIBRARY

The following motion picture films were loaned by the Motion Picture Lending Library of the State Medical Association during October:

Breech Extraction (Available through the courtesy of Mead Johnson and Company)—Student and graduate nurses of St. Joseph's and City-County Hospitals, Fort Worth.

Goodbye, Mr. Germ (Available through the courtesy of Texas Tuberculosis Association)—San Jose Health Center, staff showing at Fort Worth City Health Center, Parent-Teacher Association of the Peter Smith and Charles Nash Public Schools, Fort Worth.

Mastoid Surgery (Available through the courtesy of Dr. Louis Daily, Houston)—Student and graduate nurses of St. Joseph's and City-County Hospitals, Fort Worth.

Resuscitation of the Newborn (Available through the courtesy of Mead Johnson and Company)—Student and graduate nurses of St. Joseph's and City-County Hospitals, Fort Worth.

Sulfonamide Therapy (Available through the courtesy of Lederle Laboratories)—Harris School of Nursing, Fort Worth.

Tuberculosis, Diagnostic Procedure in (Available through the courtesy of Texas Tuberculosis Association)—Harris School of Nursing, Fort Worth.

Vitamins, and Some Deficiency Diseases (Available through the courtesy of Lederle Laboratories)—Dairy short course extension students and workers, Texas Agricultural and Mechanical College, College Station.

NEWS

Psychiatry Seminar.—A seminar for State Hospital System physicians, nurses, sociologists, and home placement agents was conducted at the San Antonio State Hospital the last week in September. Dr. Stephen Weisz, professor of psychiatry at the University of Texas School of Medicine, Galveston, conducted the study under the sponsorship of the State Board of Control, the Hogg Foundation for Mental Hygiene, the University of Texas School of Medicine, and the San Antonio State Hospital.—*The Texan* (Austin).

A Dinner Honoring Dr. H. F. Connally, Waco, President of the State Medical Association, was given by fifteen San Angelo physicians September 20 when Dr. Connally was passing through San Angelo, the San Angelo *Standard* reports. Dr. Connally spoke on some of the policies of the Association regarding current medical problems.

The International College of Surgeons will hold its tenth annual convention and convocation December 7-8 at the Mayflower Hotel, Washington, D. C. Approximately two hundred surgeons will receive their fellowship in the organization, and a scientific program will be presented.

A Contest for Physician-Artists is being announced by the American Physicians Art Association in coöperation with Mead Johnson and Company. War bonds are offered as prizes to physicians in the Armed Services and in civilian practice for the best artistic works depicting the medical profession's "skill and courage and devotion beyond the call of duty." Details may be secured from Dr. F. H. Redewill, Secretary of the American Physicians Art Association, Flood Building, San Francisco, Cal., or from Mead Johnson and Company, Evansville 21, Ind.

Winthrop Chemical Company Expands.—Construction of new research laboratories for Winthrop Chemical Company will begin next spring, Dr. Theodore G. Klumpp, president, has announced. Situated near the present plant at Rensselaer, N. Y., the new laboratory building will provide facilities for a research organization twice as large as that now used. It is hoped to inaugurate a series of studies in tropical medicine, with especial emphasis on diseases common to Latin America and the Near East. The building will include offices for the administrative staff, space for an 80,000 volume technical library, photographic, x-ray, and extreme temperature testing rooms, and laboratory units in which 350 scientists will be employed exclusively in research, as compared with the present 175.

Dallas Clinical Conference.—The Fifteenth Annual Spring Clinical Conference of the Dallas Southern Clinical Society will be held at the Hotel Adolphus in Dallas, March 18-21, 1946. After three years of inability to stage the annual meeting, those in charge hope to bring an unusually good program to the 1946 session. Among distinguished guests invited to participate are Drs. Charles A. Doan, Columbus, Ohio (medicine); J. Arnold Bargen, Rochester, Minn. (gastroenterology); Col. John C. Woodland, Fort Sam Houston (military medicine); Alfred Blalock, Baltimore (surgery); John S. Lockwood, New Haven, Conn. (surgery); Richard H. Sweet, Boston (surgery); Charles B. Huggins, Chicago (urology); Joe V. Meigs, Boston (gynecology); Donovan J. McCune, New York City (pediatrics); Edmund B. Spaeth, Philadelphia (ophthalmology); A. C. Furstenberg, Ann Arbor, Mich. (otolaryngology); William H. Sebrell, Washington D. C. (basic science). The all-inclusive registration fee of $10 for civilians, $5 for military personnel will cover general assemblies, clinics, round-table luncheons, conferences and symposia, lectures, motion pictures, technical exhibits, a night buffet and smoker, and the annual clinic dinner. Those interested in advance registration or further information should write the Secretary, 433 Medical Arts Building, Dallas 1, Texas.

Lubbock Memorial Hospital, a non-profit, open staff institution, has been chartered to take the place of Lubbock General Hospital, the Lubbock *Avalanche-Journal* states. The new hospital, a proposed $1,000,000 plant designed to accommodate 200 patients originally, will be moved from the downtown site of the present hospital in line with a general attempt to remove hospitals, churches, and other non-business enterprises to allow for business expansion.

Formation of the hospital foundation has been announced by Drs. J. T. Krueger, J. T. Hutchinson, and M. C. Overton, who for a quarter of a century have owned and operated what was formerly known as Lubbock Sanitarium and of later years as Lubbock General Hospital. The foundation, of which Dr. Hutchinson is president, has leased the facilities of the present hospital building, which will be operated under its present management until the new building is ready, perhaps one or two years in the future.

Under the charter issued by the secretary of state, none of the profits of the hospital at any time shall go to any individual; they may be used only for expansion and improvements, for larger facilities and research. In the event the present officers and directors of the hospital fail in their trust, title shall pass to the Methodist Church. If the church fails to accept and exercise its responsibilities in this connection, the hospital shall in turn pass to the City of Lubbock.

In addition to the proposed clinic, there will be constructed a nurses home and recreational facilities for students of a nurses training school. The hospital will also provide for intern training.

The World's Largest Supply of Anti-Rh Type Blood Serum is now available at Baylor University's Buchanan Blood, Plasma, and Serum Center in Dallas, Dr. Joseph M. Hill director, has announced through the Dallas *News*. The center is already sending its testing serum to ninety American cities in thirty-nine states, to the United States Army, and to dozens of foreign countries.

It had been discovered that the Rh factor in human blood cells, which is positive in about 85 per cent of Americans, created difficulty in transfusions and in childbirth unless the blood was properly matched in that respect as well as in O, AB, A, and B types, which is entirely unrelated to the Rh factor. Satisfactory treatment in such cases was found, but sufficient amounts of testing serum were difficult to secure because the blood of animals was not satisfactory and the blood of afflicted human beings was too weak to furnish more than small amounts of serum.

Dr. Hill and Dr. Sol Haberman, bacteriologist and serologist, conceived the idea of increasing the antibodies in patients having Rh negative blood by controlled injections of Rh positive cells until their blood contained a higher percentage of antibodies than any other human blood. Four women volunteered for the project and in a few weeks their blood had been built up to tremendous typing strength. Together they donated six pints of blood, from which the testing serum has been made. The women suffered no ill effects from their participation and their sensitivity will gradually return to normal, Dr. Hill said.

Typhus Control in San Antonio.—The Typhus Advisory Committee of San Antonio held its monthly meeting September 25 to inaugurate the "one-two punch" typhus campaign. This type campaign, explained Dr. L. C. Robbins, is designed to inform the public as to the dual approach to typhus control by dusting DDT in rat runs, followed in one week by rat poison or some other means of rat eradication. It is being sponsored by the Texas State Health Department, the San Antonio City Health Department, the Junior Chamber of Commerce, the U. S. Fish and Wildlife Service, and the Typhus Advisory Committee, and will be promoted in San Antonio through leaflets to be distributed through industry and schools and through posters.

Representatives from Fort Sam Houston, Kelly Field, the State Health Department, the Junior and Senior Chambers of Commerce, the San Antonio Health Department, the Eighth Service Command Laboratory, Randolph Field, and drug, feed, and pest control concerns heard of encouraging results in treatment of typhus fever with para-aminobenzoic acid, of the dusting and poisoning program in the business districts, and of the possibilities of expanding the program in San Antonio.

In a smaller preliminary meeting the results of dusting 26,000 premises in San Antonio with DDT were described by Dr. David E. Davis. The number of cases of typhus fever in the experimental area was much smaller than last year and smaller than the number of untreated areas, so that the committee agreed a publicity campaign explaining the value of DDT in controlling typhus was justified.

Typhus Control in Brown County.—Brown County Commissioners' Court agreed to pay the cost of employing two workers for a typhus control campaign in Brownwood and Brown County, starting about October 1, the Brownwood *Bulletin* reports. Dr. E. W. Prothro, acting director of the Brownwood-Brown County Health Unit appeared before the Court to discuss the program of control in which DDT and rat poison was to be used in treatment of public and business buildings, at no cost to individual firms or organizations, in an attempt to prevent typhus fever. A recommendation by the State Health Department that a city-county health board be appointed, also presented by Dr. Prothro, was acted on favorably by the Commissioners.

Occupational Therapy Lectures.—Lectures for the occupational therapy course at Texas State College for Women are being given by Dr. Fred T. Rogers and Dr. Francis T. Harrington, members of the faculty at the Southwestern Medical College, Dallas, Dr. L. H. Hubbard, president of the Texas State College for Women, has announced. Dr. Rogers is delivering a series of weekly lectures in neurology, which will be followed beginning in November by a series by Dr. Harrington on psychiatry. The occupational therapy course was begun last year and may be taken for credit or non-credit.—*Denton Record.*

Talks on Pediatrics by Dr. Arild Hansen, professor of pediatrics at the University of Texas School of Medicine, and Major Harry H. Gordon, associate professor of pediatrics at Cornell University Medical School, were made at a joint meeting of the Dallas County Medical Society and Dallas Pediatric Society on September 27.

A collection of infant feeding bottles dating back to the year 600 B. C., embracing major civilizations from the Egyptian, Greek, and Roman to the Seventeenth Century French, English, and German was on display. The collection was made by the late E. Mead Johnson, Jr., and is the property of the Medical Museum of Cleveland. Now on tour for exhibit throughout the country, the collection was in Dallas during the month of October.

Texas Surgical Society held its fall semi-annual meeting October 8-9 in San Antonio. The following scientific program was carried out on the morning of the first day of the meeting:

Cancer of the Breast—Frank Selecman, M. D., Dallas.
The Cytological Study of 1,100 Nipple Secretions As an Aid in the Diagnosis of Breast Lesions—Dudley Jackson, M. D., and A. O. Severance, M. D., San Antonio.
An Operation for Painful Arthritis of the Hip—C. S. Venable, M. D., and Walter Stuck, M. D., San Antonio.

Sarcomas of the Gastro-Intestinal Tract—G. V. Brindley, M. D., Temple.
Hypertrophic Pyloric Stenosis in Infancy—R. J. White, M. D., Fort Worth.

The afternoon session was held at the School of Aviation Medicine, Randolph Field, and consisted of the following:

Greetings—Col. Fratis L. Duff, Assistant Commandant, School of Aviation Medicine.
The Research Program at the School of Aviation Medicine—Major Herman S. Wigodsky, Acting Director of Research, School of Aviation Medicine.
Symposium on Aircraft Accidents
1. The Theory of the Production of Injuries by Deceleration.
2. Experimental Production of Injuries by Deceleration (High Speed Movies—4,000 feet per second)—Capt. Harry D. Kingsley, School of Aviation Medicine.
3. Pathology of Lesions Occurring in Aircraft Accidents—Major George M. Hass, Chief of the Department of Pathology, School of Aviation Medicine.

Transthoracic Resection of the Stomach for Carcinoma of the Cardiac Portion—O. T. Clagett, M. D., Mayo Clinic, Rochester, Minn.
An Improved Method for the Radical Resection of Advanced Carcinoma of the Rectum—Chief of the Department of Surgery, School of Aviation Medicine.
Trip through the Research Division, School of Aviation Medicine, Including an Exhibit on the Surgical Repair of Remedial Defects in A. A. F. Personnel.

Major Randolph L. Clark, Jr., under whose direction the above program was planned, gave an interesting explanation of the surgical services of the School of Aviation Medicine and illustrated his remarks with reproductions of medical photographs used in the teaching of aviation medical examiners. Coöperating with Major Clark in making arrangements for the program was Dr. Walter Stuck, San Antonio, secretary of the Society.

On the second day of the meeting the following program was carried out:

Intraperitoneal Hemorrhage—L. M. Wiig, M. D., San Angelo.
Sodium Pentothal in Thyroid Surgery—W. E. Crump, M. D., Wichita Falls.
The Treatment of Infection in the Lower Extremities in the Presence of Diminished Blood Supply—Beverly C. Smith, M. D., Attending Surgeon, Presbyterian Hospital, New York City.
A Decortication Operation for Chronic Constrictive Pleuritis—Major Donald S. Paulsen, Chief of Thoracic Surgery Section, Brooke General Hospital.
Discussion—Major Albert Hartman.

During the business session, officers for the ensuing year were elected as follows: Dr. G. V. Brindley, Temple, president; Dr. Joe White, Fort Worth, first vice-president; Dr. James Greenwood, Houston, second vice-president; Dr. Walter Stuck, San Antonio, secretary; Dr. C. B. Carter, Dallas, treasurer; Dr. G. W. N. Eggers, Galveston, recorder; and Dr. J. V. Goode, Dallas, council.

The Society voted to hold its spring meeting April 1 and 2, 1946, in Temple.

Dr. Charles F. Clayton, Fort Worth, and Dr. Ozro Woods, Dallas, were elected to membership.

Entertainment in connection with the meeting consisted of a luncheon October 8 in the Plaza Hotel ballroom, and a cocktail party and dinner that evening at La Villita.

Southwestern Medical Foundation has opened a drive to secure $1,300,000 for a five-year operating fund. This fund is entirely separate from the building fund, for which $1,000,000 was raised in 1943 to build a medical college adjacent to the city-county hospital, Dr. E. H. Cary, president of the Foundation emphasizes. An enlarged medical program in the city and county has necessitated the establishment of an operating fund. The medical college has not made demands on the city-county hospital which would increase the budget, and has received no money from tax-supported budgets, Dr. Cary says. Instead, the school has contributed to the care of the sick by paying for the services of distinguished physicians who render service to indigent patients of Dallas county. Expense for this purpose amounts to $50,000 a year, which is defrayed by the Foundation. In addition it carries on research programs which are available to the city-county hospital. To lead the drive for funds Fred M. Lange, vice-president and managing director of the Foundation, has announced the names of George L. MacGregor, president of the Dallas Power and Light Company, and J. B. Adoue, Jr., president of the National Bank of Commerce.

University of Texas School of Medicine.—Approval by the State Board of Control of a proposal by the University of Texas School of Medicine to make a three-year survey of cancer among women patients in state institutions has been received with expressions of gratitude from the school's personnel, the Galveston *Tribune* states. Permission to make such a survey has been sought for some time. The program will probably be under the direction of Dr. Paul Brindley, professor of pathology, and director of the school's tumor clinic, Dr. Chauncey D. Leake, dean and executive vice-president of the school, says. It is hoped the survey will give a fair index of the incidence of cancer in the general population and of the types most likely to be found among Texans.

The auditorium of the Out-Patient Clinic Building was named Randall Hall on the opening of the fall session of the University of Texas Medical Branch, honoring Dr. Edward Randall (1860-1944), who served as professor of materia medica and therapeutics from 1890 to 1929, at which time he became professor emeritus and chairman of the Board of Regents of the University of Texas.

Regents of the University of Texas in their September meeting voted to sponsor Houston's Texas Medical Center by erecting a building for a dental college, the M. D. Anderson Hospital for Cancer Research, and a school of public health, to be followed later by postgraduate schools and a school of geographic medicine. In addition to the University's part in the center, plans call for construction of a children's hospital, Baylor University College of Medicine, a Negro school of dentistry and medicine, the Houston Academy of Medicine Library, a doctors and dentists building, a new Hermann Hospital, St. Luke's Episcopal Hospital, Methodist Hospital, administrative building, and other structures. The Regents estimate that $6,250,000 will be required to erect the buildings planned by the University for early construction.

Dr. George Herrmann, professor of medicine, spent two weeks in Mexico City recently as a guest of the Institute of Cardiology and of the Institute for Nutritional Diseases, speaking on the relation of cholesterol to liver disease. He also attended the first Inter-American Conference on Typhus Fever, held in Mexico City October 7-14.

Also attending the Conference on Typhus Fever was Dr. Ludwik Anigstein, associate professor of preventive medicine, who discussed the classification of rickettsia.

Baylor University College of Medicine.—Bids on construction of the $1,000,000 Baylor University College of Medicine building, the first unit to be planned for the Texas Medical Center in Houston, have been requested by the building committee, the Houston *Post* reports. The building will be E-shaped, with a four-story center section housing an auditorium, and will be finished in either brick or stone.

Military Personals

Lt. Col. F. Clay Weekley, M. C., A. U. S., has recently been promoted from the rank of major, the Ennis newspaper reports. Colonel Weekley has been overseas since September, 1943, as division surgeon with the Third Armored Division. He hopes to be home by Christmas.

Lt. Col. J. B. Harabeck, M. C., A. U. S., of Houston, has recently been promoted from the rank of major, the Houston *Press* states. Colonel Harabeck

has been in service for five years and is at present stationed in the Marianas.

Capt. Van C. Tipton, M. C., U. S. N. R., has been promoted from the rank of commander, according to the Georgetown *Sun*. Captain Tipton left for the Pacific war zone in January and is stationed somewhere in the Ryukyus.

The work of *Capt. J. T. Mills*, M. C., U. S. N. R., formerly of Dallas and now head of the Naval Hospital at Great Lakes, Ill., has been cited in an article in the Chicago *Sun*, reports the Dallas *Times Herald*. The center at Great Lakes is one of the Navy's five specialized centers for plastic surgery.

Comdr. Robert C. Douthat, M. C., U. S. N. R., executive officer of the Naval Hospital now under construction in Houston, has been awarded the legion of merit for outstanding service as medical officer on a battleship in eleven major operations, states the Houston *Post*.

Capt. Lewis E. Morgan, M. C., A. U. S., was graduated from the Army Air Forces School of Aviation Medicine, Randolph Field, September 15, the Bonham *Favorite* states. Captain and Mrs. Morgan visited in Bonham the following week-end en route to Indianapolis, Ind., where he is now stationed.

Lt. Col. John L. Matthews, M. C., A. U. S., has been placed on inactive duty following fifty-eight months of service. Since January, 1942, Colonel Matthews has been chief of the department of ophthalmology of the Army Air Forces School of Aviation Medicine, Randolph Field. He will resume private practice in San Antonio.

Major A. D. Pattillo, M. C., A. U. S., recently returned for a visit to his home in Wichita Falls after three and a half years in Hawaii, on Saipan, the New Hebrides, and Okinawa, the Wichita Falls *Times* reports. Major Pattillo is with the neuropsychiatric service of the Army and was awarded the bronze star for meritorious service against the Japanese on Saipan and Okinawa and in planning, handling, and caring for mental cases.

Major Ken Mooney, M. C., A. U. S., has been visiting his parents in Dallas after three and a half years with the 204th General Hospital unit on Oahu and Guam, according to the Dallas *Times Herald*.

Dr. John M. Crawford, M. C., A. U. S., formerly of Carrizo Springs, was in San Antonio for reassignment the first week in September, following service in Europe, the Carrizo Springs *Javelin* states.

Capt. George F. Adam, Houston, has been discharged from the Army Medical Corps after serving two and a half years in Africa and Italy and will resume the practice of obstetrics and gynecology in Houston, the Houston *Chronicle* reports.

Major J. C. Gonzalez, Jr., has reopened offices in Benavides, states the Benavides *Facts*, after an absence of four years during which he served as a medical officer with the Army. Major Gonzalez saw overseas service in the Philippines.

Col. George Sladczyk has been released from duty with the Army Air Corps, according to the Port Arthur *News*, and has resumed practice in Port Arthur. Colonel Sladczyk enlisted in May, 1942, and since July of that year had been assistant surgeon of the chief industrial medical section at Wright Field, Ohio.

Major W. S. Miller, Jr., after serving in the Army since January, 1941, has been released and is resuming his practice in Denton, the Denton *Record* reports. Major Miller went overseas in May, 1943, as commanding officer of the 804th Medical Air Evacuation Squadron on New Guinea. Injured in a crash landing of a hospital plane, he returned to this country in August, 1944. His latest station was Sheppard Field.

Major Sidney Schnur, said to have been the first Houston medical reserve officer to be called for service, has resumed private practice in that city after almost five years in the Army, the Houston *Chronicle* states. Major Schnur has received the bronze star, Presidential unit citation, three battle stars, and a citation from General Joseph Stilwell. He was flight surgeon for the India Air Task Force.

Among Corpus Christi physicians being released from the Armed Forces, the Corpus Christi *Caller-Times* names *Capt. Gordon Heaney*, a veteran of three years in the European theater; *Capt. George J. Merriman*, who has been in service four years; *Capt. Charles Louis Concklin*, who served in England, France and Germany; *Capt. Foy Moody*, serving recently in France; and *Major James Sharp*, now at Camp Bowie after twenty-two months in the European theater.

Lt. Col. Joe J. Pate, a member of the medical staff of the Thirty-sixth Division from its organization at Camp Bowie through its action in Africa and Italy, has opened offices in Dublin, according to the Dublin *Progress*. Colonel Pate practiced in Paducah prior to the war.

Major J. R. Jeter is on terminal leave in Ennis, where he expects to resume practice, following two and a half years of service in the Pacific, the Ennis *News* reports. Major Jeter went to Hickman Field, Honolulu, Hawaii, immediately after the attack on Pearl Harbor, and was a flight surgeon in the invasion of the Gilbert and Marshall Islands.

Capt. Ben L. Lerner, after five years with the Army Medical Corps, is resuming private practice in Houston, states the Houston *Post*. Captain Lerner was called to service in 1940 and went overseas in 1942, serving both in Europe and Australia.

Lt. Comdr. Tony Fears, who has been in the Navy more than three years, and *Lt. Col. Lamar Bevil*, who has been in service since 1941, are resuming private practice in Beaumont, according to the Beaumont *Journal*.

Capt. R. A. Kooken has returned to Hamilton to resume private practice after serving as flight surgeon in the Army Air Corps for two and one-half years in North Africa, Sicily, and England, the Hamilton *Herald* states.

Major Walter B. Adams, Jr., recently discharged from the Army after more than three years of service as a flight surgeon, has returned to private practice in Wichita Falls, according to the Wichita Falls *Times*. Major Adams was attached to a troop carrier group and participated in the invasions of Normandy, southern France, and Germany. He wears the bronze star and a Presidential unit citation.

Major Tom Oliver, the first medical reserve officer from Waco ordered to active duty, has received his discharge and has returned to the practice of general surgery in Waco, states the Waco *Tribune-Herald*. Major Oliver served in this country from September 22, 1940, until January, 1944, when he went to India. He participated in campaigns in Burma and China as chief of the surgical services of field hospital units and wears the bronze star.

Capt. M. C. Carlisle has also returned to Waco to practice, the Waco *Tribune-Herald* continues. Captain Carlisle entered service in May, 1943, and has served almost continuously with the Woodrow Wilson General Hospital, Staunton, Va., which is the medical center for the Third Service Command.

Major T. L. Pecora, who has been in the Army Medical Corps for about three years, most of the time in the Panama Canal Zone, has resumed practice in Beaumont following discharge, the Beaumont *Journal* reports.

Capt. Braswell Locker, son of Dr. and Mrs. H. L. Locker, Brownwood, has been discharged from the Army, the Brownwood *Bulletin* states. Captain Locker entered service in August, 1942, and served as a flight surgeon in Europe, Africa, and South

America, beginning in February, 1944. He plans to go into private practice after completion of a refresher course at the University of Texas School of Medicine.

Major O. N. Mayo has been with his family in Brownwood after serving four years and four months with the Army as x-ray department chief at Camp Wallace, Fort Bliss, and Brooke General Hospital, the Brownwood *Bulletin* states. Major Mayo also saw service in World War I. He plans to take postgraduate work in Chicago and Rochester, Minn., before resuming his practice in Brownwood.

Capt. C. L. Behrns has returned to Alice to practice following his release from the Army, the Alice *News* reports. Captain Behrns has been in service about three years, serving a number of months in the jungles of the South Pacific.

Three members of Baylor University School of Medicine's Evacuation Hospital 56 have returned to Dallas, the Dallas *News* reports. They are Col. *Christopher B. Carter*, chief of surgical service; *Major F. J. Sebastian*, and *Major Charles D. Bussey*. *Col. Henry M. Winans*, professor of medicine at Baylor, who organized the unit, is still in service at San Antonio. In thirty months of overseas service, the unit was in the fighting in North Africa and Italy, and for ten weeks on the Anzio beachhead there were only five days when the group was not being shelled.

Dr. E. R. Moser, who has just been released from military service after three years in the Mediterranean and European theaters, has returned to Longview to resume practice, according to the Longview *News*.

Capt. John Allen Moet has returned to private practice in Orange Grove, informs the Orange Grove *Observer*.

Major H. B. Tandy is resuming practice in Ozona after more than two years of service in North Africa and Italy, the Ozona *Stockman* reports.

Lt. Col. John W. Garnett, Jr., who has been in service five years, has been discharged and will resume practice in Fort Worth, the Fort Worth *Star-Telegram* informs.

The Surgeon General's office has recently announced the promotion of *William Anthony Wiesner*, San Antonio, and *Francis William Wilson*, Luling, from the rank of major to that of lieutenant colonel in the Army Medical Corps.

Dallas County Medical Society is announcing through Sunday issues of the local newspapers return from the Armed Services of the following members of the Society: *Doctors William Thomas Barr, Norman Blaine Beaver, Robert Garland Carpenter, Christopher Bennett Carter, Sidney Galt, Bruce Alexander Knickerbocker, Robert Leslie Moore, John Bailey Peyton, Raoul Simon Rosenthal, Robert Roeder Shaw, George Augustus Schenewerk, Louis Weir Smith, Robert Augustus Trumbull, Price Mars Walker*, and *Ozro Theo Woods*.

Personals

Dr. H. G. Cull will soon report to Houston as venereal disease medical officer, Dr. Austin E. Hill, city health officer, advises through the Houston *Chronicle*. Dr. Cull is in service in Louisiana but expects to be released for his new duties soon.

Dr. G. L. Nesrsta, who has practiced medicine in Ozona in recent years, will take a two-weeks' refresher course in internal medicine at Ann Arbor, Mich., before moving to San Angelo, the Ozona *Stockman* informs.

Dr. John T. Harrington, Waco physician and chairman since 1932 of the board of trustees of Baylor University, was honored with a reception formally opening Harrington Hall, a dormitory redecorated and renamed for him, at Baylor University, Waco, September 28, according to the Waco *Tribune-Herald*. Dr. Harrington has practiced medicine sixty-six years and has been associated with Baylor as official physician and later as a member of the board for forty-eight years.

Dr. K. S. Wooliscroft, of De Leon, is taking postgraduate work at Rochester, Minn., the De Leon *Free Press* states.

Dr. G. Miller, Big Spring, has been appointed superintendent of the Big Spring State Hospital, succeeding Dr. Glenn S. Weaver, who died recently, the Moody *Courier* informs. Dr. Miller formerly practiced in Ozona and Moody. He was connected with government hospitals elsewhere before joining the staff of the hospital at Big Spring as assistant superintendent some weeks ago.

Dr. H. C. Samuel has been appointed assistant superintendent of the State Tuberculosis Sanatorium, the San Angelo *Standard-Times* states. He succeeds Dr. Walter C. Brown, who resigned to enter private practice in Corpus Christi. Dr. Samuel has been on the medical staff of the sanatorium off and on since 1941.

Dr. Decker Smith and *A. L. Davis* have purchased the J. K. Smith Clinic in Texarkana, and will enlarge it, according to the Texarkana *Gazette*. At the death of Dr. J. K. Smith in 1936, his son, Dr. Decker Smith, continued operation of the clinic, but not as owner until the recent sale.

Dr. C. G. Swift, Cameron, has gone to Chicago for post-graduate work in surgery at Cook County Hospital, the Cameron *Enterprise* reports. Dr. Swift will visit the Mayo Clinic before his return.

Dr. A. G. Sneed, Denison, has retired from active practice following a heart attack suffered last January, the Denison *Herald* informs.

Dr. and Mrs. Joseph Hill McCracken, Mineral Wells, celebrated their golden wedding anniversary with a reception at the Baker Hotel, Mineral Wells, October 15. Dr. McCracken has practiced medicine in Mineral Wells for fifty-five years. The minister and two bridesmaids who participated in the wedding fifty years ago were present at the reception, according to the Fort Worth *Star-Telegram*.

Dr. J. Smith has sold his clinic building in Denison for use as a residence, the Denison *Press* reports, and expects to spend several months in San Antonio.

Dr. C. A. Dwyer, Jr., county psychiatrist for Harris County, has been appointed supervisor of the psychopathic ward and the juvenile detention home as well, the Houston *Post* informs.

Dr. H. L. Klotz, Austin, has been named as a member of the State Board of Medical Examiners, to succeed *Dr. Will Watt*, Austin. Dr. Watt resigned to become a member of the Game, Fish, and Oyster Commission.

Dr. John M. Travis, Jr., who was graduated from Baylor University Medical College in 1942 and who completed an internship and a two year residency in obstetrics and gynecology at Charity Hospital, New Orleans since that time, is now on the staff of Nan Travis Hospital and Travis Clinic in Jacksonville.

Marriages

Dr. H. E. Chandler, Mount Vernon, was married September 16 to Miss Ellen Colley, also of Mount Vernon.

William Ladelle Howell, Lt. Col., M. C., A. U. S., of Fort Worth, was married to Miss Catherine Patricia Herbst, Washington, D. C., August 30.

SOCIETY NEWS

Bell County Society

August 1, 1945

(Reported by O. B. Gober, Secretary)

The Modern Management of Uterine Prolapse—L. W. Pollok, Temple.

Bell County Medical Society met August 1 at the

Kyle Hotel, Temple, with twenty-three members and one guest present. The president, R. R. Curtis, presided. Following discussion, the Society voted to approve establishment of a county tuberculosis association.

Resolutions of sympathy were adopted on the death of Dr. William F. Etter, of Rogers.

The scientific program as given above was carried out.

Bowie County Society

September 21, 1945

Sanitation Problems in Texarkana—Earl H. Smith, Director, Bowie County Health Unit, Texarkana.

Bowie and Miller (Arkansas) County Medical Societies held a joint meeting at the Hotel McCartney, Texarkana, on September 21.

Earl H. Smith, director of the Bowie County Health Unit, in discussing sanitation problems in Texarkana, pointed out that the water supply of Texarkana is safe but that some of the areas adjacent to the city limits use open wells, the water of which is unsafe for the people who use it and an indirect menace to the city. He said that the pasteurized milk supply for the city is safe, but that sewage disposal is not adequate in that there are between 800 and 1,000 insanitary privies within the limits of Texarkana, Texas. Dr. Smith declared that at least one of the slaughter houses which furnishes meat for Texarkana is in a deplorable condition. When recently inspected, it was teeming with flies and maggots. The only water supply was a pond 50 or 75 feet away. Unusable portions of the animals were fed to hogs in a pen just outside the building. He also stated that the malaria control program for Bowie County fails effectively to control the mosquito population of the city and that no adequate system of garbage disposal is in effect.

Dr. Smith recommended a program of education, particularly for the children of Texarkana, a city abattoir for the slaughtering of animals, elimination of open pit privies, mosquito control within the city limits, and an effective system of garbage collection and disposal. The Society passed a resolution urging that the program of education in sanitation, nutrition, and communicable diseases be put into effect, and empowered C. H. Frank, president of the Bowie County Medical Society, and N. B. Daniel, president of the Miller County Medical Society (Arkansas) to appoint a public health committee to work with other organizations in Texarkana in an effort to improve the sanitary conditions of the city.

Dallas County Society

September 13, 1945

(Reported by W. W. Fowler, Secretary)

Multiple Myeloma and Porphyrinuria—Rod Buie.
Extra-Uterine Pregnancy at Term—Ralph Simons.
Hyperparathyroid Adenoma—Leo Friedman.
Serum Amylase—Charles B. Dryden and Eugene M. Addison.
The Use of Desiccated Red Blood Cells in Treatment of Ulcers of the Skin (lantern slides)—Robert L. Holmes and Arthur Mims.

The Dallas County Medical Society met September 13 in the Medical Arts Auditorium, Dallas, with the president, G. E. Brereton, presiding, and thirty-five present.

Jack G. Kerr, representing the publicity committee, presented an educational campaign to be run in the newspapers by Skillern's Drug Company in opposition to the socialization of medicine. The Society endorsed the proposed campaign.

Elliott Mendenhall, chairman of the legislative and public relations committee, called attention to the State legislative program and also to the Wagner-Murray-Dingell bills before Congress, urging that members acquaint themselves with these programs, pay their poll taxes, and vote.

William F. Guerriero proposed that the Society inaugurate an educational campaign to give the public correct medical information by conducting a series of programs through the newspapers and the radio and by members of the Society giving lectures from time to time to the senior classes of the high schools. On motion and second, such a campaign was endorsed. In accordance with a motion by M. O. Rouse, the president appointed a committee to confer with the Board of Education and teachers of the public schools concerning this matter and to report back to the Society. The committee appointed was as follows: J. H. Black, chairman; Dr. Guerriero, vice-chairman; John L. Goforth, David W. Carter, Jr., H. A. O'Brien, Lloyd B. Sheffield, J. W. Duckett, Donald G. Kilgore, and J. Shirley Hodges.

President Brereton presented a letter from the Council of Social Agencies requesting the Society to select a member to represent it on the Council. It was voted that a representative be appointed by the president. Dr. Guerriero was so appointed.

J. R. Maxfield, Jr., called attention to the need for transportation of patients to and from hospitals and stated that since cab companies had no competition it was sometimes difficult to secure transportation. He moved that a committee be appointed to take this matter up with the companies, and if no results were secured, to carry the problem to the Council. The motion carried, and Dr. Maxfield (chairman), Tom E. Kelly, and A. R. Thomason, Sr., were appointed to the committee.

Resolutions of sympathy on the death of Dr. R. S. Usry, of Dallas, presented by George L. Carlisle, were adopted.

William Preston Blocker, Jr., and Malcolm McNatt were elected to membership.

M. O. Rouse, chairman of the program committee, presented Rod Buie and Ralph Simons, who read the papers named above, and then called on Donald Slaughter, dean of Southwestern Medical College, to present members of the senior class of September, 1945, who gave the remainder of the program. A paper on hyperparathyroid adenoma was read by Leo Friedmann and discussed by Fred Rogers. Serum amylase was the subject of a paper read by Eugene M. Addison, of which he was joint author with Charles B. Dryden. This paper was discussed by J. M. Dowis. Robert L. Holmes read a paper on the use of desiccated red blood cells in the treatment of ulcers of the skin, of which he was joint author with Robert L. Holmes. This paper was discussed by William F. Guerriero and C. C. Nash.

Gray-Wheeler Counties Society

September 20, 1945

(Reported by H. L. Wilder, Secretary)

Anemia (lantern slides)—W. C. Levin, Galveston.
Diseases of the Spleen (lantern slides)—W. L. Marr, Galveston.

Gray-Wheeler Counties Medical Society met September 20 at the Hillson Coffee Shop, Pampa, with fifteen present. Following dinner, the meeting was called to order by the vice-president, W. Purviance. The scientific program as given above was carried out.

The address of Dr. Levin was discussed by Dr. Purviance, H. L. Wilder, W. C. Barksdale (Borger), and H. E. Nicholson (Wheeler).

Dr. Marr's address was discussed by Dr. Purviance, J. M. Key, Capt. Albert W. Hartman (Pampa Army Air Field), and Lt. Col. E. M. Smith (Pampa Army Air Field).

Letters from the State Medical Association and others regarding the Wagner-Murray-Dingell bills were read. Cartoons for publication in newspapers, in opposition to these bills, were displayed. It was voted to publish the cartoons and to make special

assessment against the members to cover expenses.

A letter from J. B. White, of Amarillo, president of the Texas Tuberculosis Association, concerning the building of additional tuberculosis sanatoriums by the state was read. The Society voted to coöperate in any way possible with the program.

Jefferson County Society

September 10, 1945

(Reported by L. R. Byrd, Jr., Secretary)

Some Unattained Pediatrics Objectives—W. D. Brown, Beaumont.

Jefferson County Medical Society met September 10 at St. Therese Hospital, Beaumont, with Stuart Wier, president, presiding. The scientific program as given above was carried out. The paper by Dr. Brown was discussed by J. A. Bybee, S. R. Frank, Irma M. McFadden (Port Arthur), Dr. Martin, and H. E. Alexander.

October 8, 1945

Dermatoses of the Face—E. B. Ritchie, University of Texas School of Medicine, Galveston.

Jefferson County Medical Society met at St. Mary's Hospital, Port Arthur, October 8. President Stuart Wier presided.

E. B. Ritchie, University of Texas School of Medicine, Galveston, talked on "Dermatoses of the Face." His talk was discussed by W. A. Smith, B. J. Fett, E. C. McRee, L. R. Byrd, and H. B. Eisenstadt.

J. C. Crager, reporting for the committee on public health and legislation, indicated that the druggists of Beaumont and Port Arthur were willing to cooperate in financing a series of full page advertisements combatting the Wagner-Murray-Dingell bills and similar legislation, one to appear each of five weeks in the Beaumont *Enterprise* and the Port Arthur *News*. The total cost of this program was estimated at $2,800. Dr. Crager said approximately $1,800 would be needed in addition to the sum contributed by the druggists. W. D. Brown moved that the Society underwrite the advertising program and that a special assessment of $20 per active member of the Society be made to finance the project. The motion was seconded by J. Y. Harper and carried.

Dr. Brown discussed the Speakers Bureau of Jefferson County and reported a need for additional persons to speak against socialized medicine. Dr. Crager suggested the value of using speakers outside the medical profession. T. A. Fears thought much could be accomplished by each physician talking with his own patients and placing information relating to the problem of socialized medicine into their hands.

A letter from the University of Texas School of Medicine, Post-Graduate Division was read.

Dr. Harper discussed the matter of Selective Service not exempting students in undergraduate scientific studies.

Harry Jacobson was elected to membership by transfer from Lubbock-Crosby Counties Medical Society, and Hyman J. Kaplan by transfer from Orange County Medical Society.

Smith County Medical Society

September 13, 1945

Laboratory Aids in the Diagnosis of tne Anemias—Charles Ashworth, Dallas.

Bacterial Endocarditis—Tinsley R. Harrison, Dean, Southwestern Medical College, Dallas.

Smith County Medical Society met September 13 at Mother Frances Hospital, Tyler, with guest speakers presenting the scientific program given above. Charles Ashworth discussed different types of anemias, their causes, and the methods of differentiating them. Tinsley R. Harrison gave the etiologic factors involved in the causation of bacterial endocarditis and indicated that modern treatment with penicillin has reduced the mortality from 99 to 30 per cent.

The Society adopted unanimously a resolution, copy of which will be sent to each member in the service, to the effect that it is the sense of the Society that those of its members who desire to return to private practice and who have been serving their country at the risk of their lives and at great financial loss be released at the earliest possible time consistent with the best interests of this country.

A report from the public relations committee on summer activities showed endorsement of the rat eradication program and a series of health educational broadcasts over the Tyler station. The Society voted thanks to the drug firm which sponsored the broadcasts.

Tarrant County Society

September 4, 1945

(Reported by X. R. Hyde, Secretary)

Bronchography—John A. Wiggins, Jr., Fort Worth.
Staphylectomy—R. H. Gough, Fort Worth.
X-Rays of the Mouth—R. P. O'Bannon, Fort Worth.

Tarrant County Medical Society met September 4 in the Medical Arts Building auditorium with twenty-seven members and five visitors present. The scientific program as given above was carried out.

Raymond M. Thomas, Mansfield, was elected to membership.

Tribute was paid to Dr. T. M. Jeter, of Fort Worth, who died August 4.

L. O. Godley, chairman of the public health advisory committee, stated that the committee had passed a resolution recommending a publicity program in the interest of immunizing all children of Fort Worth against diphtheria, because of the increased incidence of diphtheria in the city. After discussion it was voted that the Society go on record as requesting the Fort Worth Public School Board to pass regulations requiring of each child in the elementary grades evidence of a recent negative Schick test before entering school, beginning September, 1946.

October 2, 1945

Cancer Control in Fort Worth—T. H. Thomason, Fort Worth.
Organization and Operation of a Tumor Clinic—Charles L. Martin, Dallas.
The Texas Medical Practice Act—H. F. Connally, President, State Medical Association, Waco.

Tarrant County Medical Society met October 2 in the Medical Arts Building auditorium with forty-seven members and seven visitors present.

The scientific program given above was introduced by John J. Andujar, chairman of the cancer education committee.

T. H. Thomason told of the recent cancer drive, stating that more than $31,000 had been contributed by 640 citizens of Fort Worth in donations ranging from fifty cents to $3,000. Dr. Thomason's talk was discussed by W. S. Barcus, Jack Furman, C. C. Garrett, F. S. Schoonover, and Col. John E. Leach.

Charles L. Martin, Dallas, described the organization and operation of the Tumor Clinic in Dallas, stating that any tumor clinic should originate with a nucleus of a radiologist, pathologist, and general surgeon, to be augmented by the addition of an internist, urologist, gynecologist, and other specialists. Dr. Martin's address was discussed by F. L. Snyder, George R. Enloe, and Dr. Barcus.

H. F. Connally, Waco, President of the State Medical Association, reviewed the history of the Texas Medical Practice Act.

Dr. Andujar reported that office space is not available to returning members of the Armed Forces and requested that members of the Society attempt to find space.

T. C. Terrell, chairman of the house and building committee, stated that the committee had met with the management of the Medical Arts Building, which was cooperating to obtain office space. He said that plans were being made to ask tenants not in business relating to the medical or dental professions

to move to new locations. Dr. Andujar moved that "the secretary be instructed to write a letter to the staff of each of the hospitals asking that charity services be thrown open to returning veterans as chiefs." The motion carried.

Mal Rumph, chairman of a special committee to investigate insurance companies and their policies previously submitted to members of the Society, reported that the Reserve Life Insurance Company, Dallas, had been investigated and that the policy presented by their representative, E. R. Spence, had been found acceptable.

H. P. Thomas was elected to membership by transfer from the Bexar County Medical Society.

Secretary Hyde read a communication from the University of Texas regarding a post-graduate program in medicine beginning October 22.

President Thomason introduced the following guests: Lt. Col. John E. Leach, formerly with Memorial Hospital, New York City, now with the Flying Training Command; Capt. Bob Barker, recently returned from overseas and in Fort Worth on a thirty-day leave; Col. Haywood Davis, stationed in Dallas; and Ted Lace, recently discharged from the Navy. Lt. (jg) John Simon, Jr., with the U. S. Public Health Service Hospital, introduced Comdr. G. S. Rader, Lt. Richard B. Leander, Lt. Thomas N. Conley, and Lt. (jg) C. T. Podgorski.

Tom Green-Coke-Crockett-Concho-Irion-Sterling-Sutton-Schleicher Counties Society

September 7, 1945

(Reported by W. Grady Mitchell, Secretary)

The Tom Green Eight County Medical Society met in the Indian Room of the Cactus Hotel, San Angelo, on September 7, with the president, William J. Swann, presiding. Thirteen members were present.

A motion made by V. E. Schulze, seconded by F. L. Hutchins, that Congressman O. C. Fisher be thanked for his continued support of medical legislation sponsored by the State Medical Association was passed.

G. A. Bunyard moved that State Representative Penrose B. Metcalfe be sent similar letters of appreciation, which motion was seconded by J. M. Rape and passed.

Dr. Schulze, chairman of the committee on legislation and public relations, presented a brief resume of the program advocated by the Public Relations Committee of the State Medical Association for combatting the Wagner-Murray-Dingell bills. Dr. Schulze thought that since Congressman Fisher had just informed him of his intention to vote against the measure such a campaign was unnecessary. The Society concurred.

J. M. Rape moved to table all Board of Health discussion. The motion was seconded by Dr. Bunyard and passed.

W. D. Anderson presented a resolution proposing that physicians be released from service in proportion to the number of discharged line officers and enlisted personnel, such resolution to be sent Congressman Fisher. Dr. Bunyard moved that the resolution also be sent Senators Tom Connally and W. Lee O'Daniel. Both motions carried.

Dr. Rape declared that physicians should make all outside calls possible and take care of Boy Scouts to keep such calls from falling into the hands of irregular practitioners during the shortage of medical practitioners.

Resolutions on the deaths of Dr. Dewey Sutton and Dr. C. T. Keyes were presented.

J. B. McKnight invited the Society to hold its October meeting at the state sanatorium.

W. B. Everett, who is completing his sixty-fifth year of practice and who recently returned from a prolonged stay in East Texas, made an interesting talk to the Society.

Seventh District Society

July 6, 1945

(Reported by M. I. Brown, Secretary)

Need for Legislation Regarding Medicine in Texas—H. F. Connally, Waco, President, State Medical Association.

The Seventh District Medical Society met July 6 at the ranch of Dr. G. F. Thornhill, of Austin, on the Austin-Bastrop highway, with 150 members and visitors present.

H. F. Connally, of Waco, President of the State Medical Association, in a talk on Texas legislation regarding medicine, reviewed old conceptions of medical practice, including licensure procedure and raising standards of various schools. N. D. Buie, of Marlin, also discussed the subject.

Robert B. Morrison, Austin, was elected president; J. D. Stevens, Bastrop, vice-president; and M. I. Brown, Austin, secretary.

AUXILIARY NOTES

Officers of the Woman's Auxiliary to the State Medical Association of Texas: President, Mrs. C. B. Alexander, San Antonio; President-Elect, Mrs. George Turner, El Paso; First Vice-President, Mrs. S. M. Hill, Dallas; Second Vice-President, Mrs. L. W. O. Janssen, Corpus Christi; Third Vice-President, Mrs. Troy A. Shafer, Harlingen; Fourth Vice-President, Mrs. Mark H. Latimer, Houston; Treasurer, Mrs. F. R. Rugeley, Wharton; Recording Secretary, Mrs. Paul H. Power, Waco; Corresponding Secretary, Mrs. Wilbur Robertson, San Antonio; Publicity Secretary, Mrs. E. L. Howard, Fort Worth; Parliamentarian, Mrs. W. R. Klingensmith, Amarillo.

AUXILIARY NEWS

The Bowie-Miller Counties Auxiliary held its first meeting of the fall on September 28 in the home of Mrs. L. J. Kosminsky, Texarkana, with Mrs. Karlton Kemp, Mrs. Reavis Pickett, and Mrs. J. H. Rives as cohostesses. About forty were present.

The program, under the direction of Mrs. P. H. Phillips, of Ashdown, consisted of a discussion of current events in medical science. Each member read an article.

During the business meeting, the president of the Auxiliary, Mrs. William Hibbitts, reported on the recent meeting of the Executive Board of the State Auxiliary in San Antonio, emphasizing the talk made by Dr. R. A. Miller of San Antonio, member of the Public Relations Committee of the State Medical Association. Mrs. Hibbitts recommended that members of the Auxiliary study the bills on socialized medicine now under consideration in Congress, pay their poll taxes, vote, learn more about state legislation, and keep abreast of public health affairs.

Minutes of the last meeting, held in the spring, were read by the secretary, Mrs. Ralph Cross, and approved. Mrs. Harry Murry, chairman of the yearbook committee, presented copies of the yearbook to members of the Auxiliary. The treasurer's report showed a balance of $14. Mrs. Roy Baskett, Hygeia chairman, outlined the work of her committee for the year.

A welcome to new members, old members, and visitors was extended by the president, who later introduced the visitors: Mrs. L. H. Lanier, Mrs. A. L. Fuller of Ballinger, and Mrs. Robert Kittrell. During the social hour, refreshments were served in the dining room.

Dallas County Auxiliary met October 3 in its first meeting of the fall at a luncheon at the Dallas Country Club. Honorees were officers of the Auxiliary: Mrs. Joseph H. McCracken, Jr., president; Mrs. J. Forest Buchanan, president-elect; Mrs. Dayton G. McBride, first vice-president; Mrs. Sidney S. Baird, second vice-president; Mrs. J. Dennis O'Brien, third vice-president; Mrs. Guy A. Tittle, recording secretary; Mrs. T. W. Bywaters, corresponding secre-

tary; Mrs. Harry B. Sowers, treasurer; Mrs. Hall Shannon, parliamentarian; Mrs. J. R. Maxfield, Jr., publicity; and Mrs. U. P. Hackney, historian.

Miss Margo Jones, who is working with "Theatre '45" in Dallas, was guest speaker. Miss Jones told of the plans to develop in Dallas a first class theater, affording an outlet for outstanding actors, playwrights, and production personnel. Her talk was in connection with a drive for funds by "Theatre '45" sponsors. She was presented by Mrs. John Bourland, program chairman.

Hostesses for the luncheon were members of the entertainment committee: Mrs. S. M. Hill (chairman), Mrs. Jack G. Kerr (vice-chairman), Mrs. Edward H. Cary, Mrs. J. H. Black, Mrs. J. Howard Shane, Mrs. John Dunlap, Mrs. Robert M. Barton, Mrs. S. F. Harrington, Mrs. Arthur G. Schoch, and Mrs. A. R. Thomasson, Jr.—Mrs. J. R. Maxfield, Jr., Publicity Chairman.

Mrs. Bruce A. Knickerbocker, member of the Dallas County Auxiliary, died August 21, 1945. She is survived by her husband, Dr. Bruce A. Knickerbocker, and her parents, Mr. and Mrs. G. A. Coffey, all of Dallas.

Galveston County Auxiliary honored the wives of new doctors in the city and county with a book review luncheon in the solarium of the Buccaneer Hotel on October 19. Miss Emma Lee, Galveston, gave a delightful presentation of Agnes Rothery's book, Fitting Habitation. Mrs. F. J. L. Blasingame, district president, and Mrs. Jarrett E. Williams, both of Wharton, and Mrs. Edwin Sykes, of San Antonio, were special guests.

Honor guests for the event were Mesdames Martin Schneider, Griff Ross, Joe Kopecky, John McClure, Jerome Weisner, T. R. Roberts, Jack Walker, and Fred Guilford.

Preceding the book review there was a business meeting. Reports were given by Mrs. S. R. Snodgrass, chairman of the program committee, on three welfare projects which the organization has been asked to undertake. These will be voted upon at the next meeting. Plans for the year were outlined by the following chairmen: Mrs. Jesse B. Johnson, study and legislative committee; Mrs. Charles Lankford, (member) nursery committee; Mrs. Raymond Blount, telephone committee; and Mrs. Raymond Gregory, health and Hygeia committee.

Mrs. Edward Lefeber was awarded the attendance prize by Mrs. H. Reid Robinson.

Officers for the year are Mrs. Paul Brindley, president; Mrs. G. W. N. Eggers, vice-president; Mrs. Arild Hansen, treasurer; Mrs. John Thiel, recording secretary; Mrs. William C. Levin, corresponding secretary; Mrs. George T. Lee, parliamentarian; and Mrs. H. C. Slocum, historian.

Hardin-Tyler Counties Auxiliary met in Kountze at the Cariker Hotel on October 9, the first meeting since June.

Mrs. W. J. Poshataske, Silsbee, president, presided over a session in which letters pertaining to the objectives of the Auxiliary were read. A discussion of programs for the coming months was held. Each member was requested to bring one item of interest to the next meeting.

Mrs. J. F. Shivers, Woodville, was appointed Hygeia chairman.

Preceding the business meeting, the Auxiliary joined members of the medical society at dinner.—Mrs. J. F. Shivers, Secretary.

Harris County Auxiliary had an officers' coffee at the home of Mrs. F. O. McGehee in Houston the morning of September 24. Honor guests were wives of physicians in service. Souvenirs sent home by doctors stationed in the European and Pacific theaters of war were displayed.

Assisting Mrs. McGehee were officers for the current year, including Mesdames A. N. Boyd, Fred Y. Durrance, D. Truett Gandy, T. H. Compere, Lyle J. Logue, W. E. Ramsay, Granville Q. Adams, John F. Rader, and C. Q. Davis. Chrysanthemums and spider lilies decorated the house.—Mrs. G. Q. Adams, Publicity Secretary.

Hidalgo-Starr Counties Auxiliary members had dinner with members of the Hidalgo-Starr Counties Medical Society at the Hotel Edinburg, Edinburg, on September 13, meeting separately afterward with seven members present. Mrs. W. E. Whigham, McAllen, reviewed the book Colcorton by Edith Pope. There was a short business meeting.

Jefferson County Auxiliary met October 3 at the home of Mrs. Herbert D. Harlan, Beaumont, for a business session and coffee. Twenty-six were present.

Mrs. John H. Carter, president, presided over a discussion of plans for the ensuing year and reports from committees.

Cohostesses included Mrs. Joe Stoelje, Mrs. Charles Todd, Mrs. L. H. Ledbetter, and Mrs. G. B. Stephenson. Seasonal flowers decorated the house and coffee table.—Mrs. Edward C. Ferguson, Publicity Secretary.

Liberty-Chambers Counties Auxiliary met October 16 in the home of Mrs. A. L. Delaney, Liberty, the president.

Mrs. Delaney reported on the executive board meeting held at San Antonio in September. Letters from board members were read, encouraging sale of *Hygeia* and health check-ups for physicians' families, and outlining rules for a contest entitled "Health Hint of the Month."—Mrs. Jack Bevil, Secretary.

Tom Green Eight County Auxiliary met October 1 at the home of Mrs. R. M. Finks, San Angelo. Mrs. Finks, president, presided.

The Auxiliary voted to purchase a $5 tuberculosis bond and to make tuberculosis seal corsages each Thursday afternoon during October.

It was decided to donate books to the County Library in memory of Dr. Dewey Sutton and Dr. C. T. Keyes both of San Angelo.

Mrs. Aubrey Lewis, chairman of the local infantile paralysis organization, reported that two patients suffering from paralysis had been helped through the summer.

Mrs. R. M. Arledge, Mrs. W. E. Schulkey, and Mrs. Finks were hostesses at the social hour.—Mrs. Victor E. Schulze, Publicity Secretary.

BOOK NOTES

[1]**Poet Physicians.** An Anthology of Medical Poetry Written by Physicians. Compiled by Mary Lou McDonough. Cloth, 212 pages. Price $5.00. Springfield, Illinois, Charles C. Thomas, Publisher, 1945.

Poet Physicians is an anthology of medical poetry written by physicians and compiled by Mary Lou McDonough, of Washington. It contains 212 pages, and quotes poems from 110 physicians, 27 of whom are still living. Represented here are the works of poets ranging all the way from the Chinese poet Wang Wei, who lived six centuries before the discovery of America, to the internationally known Philadelphia and Scranton surgeon, Temple Fay, whose poem dedicated to Harvey Cushing is one of great beauty and value.

Of course, having selected so many writers, the author of this book could mention only a few poems of each. The poems, however, are very long and on

[1]Reviewed by J. W. Torbett, M. D., Marlin, Texas.

sad subjects, many about death. The optimistic and hopeful poems of J. G. Holland and Oliver Wendell Holmes could have been used, or even those of Weir Mitchell, which Osler quoted in his anthology. It is true that they are on the subject of death also, but they picture death as promising and happy.

Miss McDonough quotes poems from such poets as Weir Mitchell, Da Costa, and even from Thayer, a very splendid physician in Johns Hopkins who writes poetry as a side line. His poem on Osler is a very fine, well-written one, and a wonderful tribute to a great man who was never forgotten by any of his patients or students.

I think the book would especially appeal to those doctors who are retired, and who have plenty of time for reviewing the doleful as well as the optimistic things of life, and whose reminiscences might harmonize with the type of poetry that has been selected for this book.

[2]**The Intervertebral Disc** with Special Reference to Rupture of the Annulus Fibrosus with Herniation of the Nucleus Pulposus. By Keith Bradford, M. D., and R. Glenn Spurling, M. D. Fabricoid, 192 pages. Second edition. Price $4.00. Springfield, Illinois, Charles C. Thomas, Publisher, 1945.

The second edition of The Intervertebral Disc has satisfactorily brought up to date the progress through the last four years of the diagnosis and treatment of herniation of the nucleus pulposus.

There has been extensive revision of the original text. The protrusion of cervical discs is heavily emphasized, and the problems of recognition, localization, and treatment are dealt with as exhaustively as the relatively sparse knowledge of them will allow. Persistent pain radiating from the back of the neck through the tip of the shoulder to the elbow is regarded as the leading symptom, while in the hand, numbness is more important.

The authors believe that many such cervical protrusions are unrecognized, and that when suspected, localization by the intra-spinal use of Pantopaque is indicated. The operation in this area is admittedly difficult. Those lesions which compress the nerve roots laterally (usually cervical roots six or seven) are readily relieved. On the other hand operations on those compressing the cord itself bring total relief to only about one-third of the patients.

The most significant addition to knowledge of the commoner lumbar protrusions is the deliberate sectioning of the dorsal sensory root on an involved nerve. This is accomplished by dissection of the dural sheath to a point proximal to the dorsal ganglion. While some anesthesia of the corresponding segment results, the authors think that it is applicable in selected cases. A simplified percussion test for localization of protruded discs is also presented.

In addition to their own experiences the authors have integrated observations from over 300 papers on the subject, many of which are quite recent.

In their conclusions the authors state, "The presence of posterior herniation of the nucleus pulposus is not an indication for surgical removal unless it has produced incapacitating radicular symptoms."

The attitude that protruded discs are responsible for most or all cases of low back pain, and the concept of the "concealed disc" receive no support in this book. The authors have dealt with the proponents of such views gently but firmly.

[3]**Arterial Hypertension.** Its Diagnosis and Treatment. By Irvine H. Page, M. D., and Arthur Curtis Corcoran, M. D. Research Division of the Cleveland Clinic Foundation, Cleveland; formerly Lilly Laboratory for Clinical Research, Indianapolis City Hospital, Indianapolis. Cloth, 352 pages. Price, $3.75. Chicago, The Year Book Publishers, Inc., 1945.

For those who are seeking a simple, dogmatic interpretation of etiology, mechanism, and therapy of arterial hypertension, this book will be a bit disappointing. This work, instead, presents a detailed survey of multiple aspects of cardiovascular physiology.

The first four sections are informative and worth reading by all interested in internal medicine. Here one is carried smoothly through a discussion of the normal blood pressure, the early stages of hypertension, the essential and malignant phases, hypertensive or congestive heart failure, and finally the effects of arterial hypertension on the brain and kidneys. Especially good is the story of the evolution of the disease and the subtle hints as to the role and application of psychotherapy in hypertension.

Section 5 is devoted to treatment. Thiocyanate, kidney extract, vitamin A, surgical treatment by nephrectomy, and the various sympathectomies are nicely discussed.

The authors believe thiocyanate has value in its slight depressant action upon the central nervous system, that it is an arteriolar relaxant, and that it has a dramatic effect in relieving hypertensive headaches. Despite their extensive work on kidney extracts, the authors claim "it would be premature to attempt to form any considered judgment about these extracts." Their opinion on vitamin A is extremely conservative, but polite. The careful selection of the patients is the cue to success in nephrectomy and it is felt that the number who will benefit is small. Sympathectomies, according to Page and Corcoran, will relieve the symptoms of headache, fatigue, nervous tension, and will effect a reprieve from the ravages of the disease. "Whether a significant fall in blood pressure will occur is problematical."

Mentioning vitamin A and not Dr. Walter Kemper's rice diet is a serious omission. It would have been interesting to read their comments on the subject.

Admittedly, there is much yet to be learned about arterial hypertension; and it is felt that this book as a "thinking treatise" is another step forward.

VENEREAL DISEASE ABSTRACTS*

An Experiment in the Psychiatric Treatment of Promiscuous Girls. (A psychiatric study under the auspices of the Venereal Disease Division of the United States Public Health Service, the California State Department of Public Health, and the San Francisco Department of Public Health, January, 1943, to June, 1944.) Ernest G. Lion, Helen M. Jambor, Hazle G. Corrigan, and Katherine P. Bradway, Psychiatric Service, San Francisco City Clinic, City and County of San Francisco Department of Public Health, 1945.

A demonstration of the application of psychotherapy and psychiatric case work as a preventive measure in venereal disease control was undertaken by the Psychiatric Service of the San Francisco City Clinic. This Psychiatric Service was set up as a cooperative experimental project under the auspices of the United States Public Health Service, the California State Department of Public Health, and the City and County of San Francisco Department

[2]Reviewed by Robert L. Sewell, M. D., Fort Worth, Texas.
[3]Reviewed by E. E. Cooper, M. D., San Antonio, Texas.

*Abstract of report distributed to the subscribers of The Journal of Venereal Disease Information (formerly Venereal Disease Information), prepared by the Venereal Disease Division, U. S. Public Health Service.

of Public Health, to provide for research and treatment of promiscuous girls in direct connection with a venereal disease clinic.

The chief objectives of the Service were to determine the personality and environmental factors that motivated the promiscuous behavior of the girls referred, and to determine to what extent psychiatric treatment might be effective in assisting them to make satisfactory adjustments, thus removing the likelihood of their behavior leading to the dissemination of venereal disease.

The study was primarily a clinical investigation from psychiatric, psychiatric social, and psychological approaches. Social histories on all patients were obtained. Psychiatric examinations were conducted routinely. Psychological studies including intelligence testing and Rorschach investigations were done on selected patients.

In the absence of a definition of promiscuity which could be used objectively, an arbitrary criterion was set up. The period of time considered was the six months immediately preceding registration in the service. Promiscuous patients included married women who had engaged in any extramarital sexual relations within that period and single women who had had sexual relations with more than one man or with one man more than twice within the same period. Prostitutes were not included.

An analysis was made of 365 female patients, of whom 287 were classified as promiscuous and 78 as potentially so. Eighty per cent were white, 20 per cent were nonwhite. The average age was 20.

Referral of patients to the Service was chiefly from the venereal disease clinic, although other community agencies referred some patients. Female patients in the clinic who were 22 years of age or younger were referred routinely, and those over 22 who were considered by a member of the medical or nursing staff of the clinic to be in need of service were admitted by special referral. The attendance of the patients at the Psychiatric Service was voluntary.

An extensive descriptive and historical work-up, including both social and personal factors, was made for each patient to determine whether some distinguishing characteristics might be found for promiscuous women. No single factor was found which, in itself, would either denote promiscuity or exclude it, but rather a nonspecific etiology was found. Unsatisfactory familial relationships, often marked by broken homes, and unstable inter-personal relationships were among the basic factors which, although not predetermining promiscuity, occurred frequently enough to suggest a direct relationship to promiscuous behavior. Sex instruction which the patient had received was usually described as being inadequate and unscientific. Conflicts of various types with reference to sex were seen in a majority of patients. Uneven development in physical, emotional, and social maturity within the individual patients was usually noted. The occurrence of neurotic tendencies was frequent, and there were suggestions that promiscuity might be considered as a neurotic equivalent in some cases. Environmental factors such as unsatisfactory living conditions, the absence of community ties, and the making of casual friendships were found often to have contributed to the promiscuous behavior.

Slightly more than one-half of the promiscuous patients were found to be habitually so. In addition, there were groups who had sexual relations on a sustained affectional basis or on an episodic basis. Some patients could not be classified as to the degree of promiscuity.

Among those who were habitually promiscuous, one-half fell into the conflictual group, whose promiscuity was the result of intra-psychic conflicts which were often in the sexual area. Nearly one-fifth were in the dependent group, whose promiscuity was an outgrowth of immaturity and undue reliance on others. Another one-fifth were in the maladapted group, whose sexual behavior was just one example of the activities which are characteristic of the unstable patient who lacks social responsibility and self-restraint. A small percentage fell into the non-conflictual group, whose promiscuity seemed to present no conflicts within the patient or between her and her social group.

The response of the patients to the services offered varied. No significant differences were found as to the use of service on the basis of age. In general, the proportion of patients who took advantage of the services increased as the intelligence level rose. When groups of patients of similar intelligence in the different racial classifications were compared, no significant differences in the use of service were apparent. Approximately one-sixth of the patients availed themselves of intensive, prolonged treatment. An additional one-half of the patients utilized consultative service. Slightly more than one-third were not interested in service.

Changes observed in patients during the course of treatment suggested that they had benefited from the services given and in particular had reduced their promiscuity. Only 40 per cent of the patients given service could be followed up successfully after six months. The number was too few for conclusive deductions, but among those successfully followed up, 90 per cent were less promiscuous and 50 per cent had entirely ceased sexual relations outside of marriage.

The experience in this project indicates that, for the greater part, services can be used by this group of patients only if they are readily available in direct connection with the venereal disease clinic. The association of the Psychiatric Service with a venereal disease clinic thus provided a unique opportunity to reach patients who do not otherwise avail themselves of the services of community agencies, or in fact as a group are not reached by other agencies. Of particular importance has been the availability of service to patients in meeting the emotional experience associated with venereal disease at a time when anxiety has been aroused by the presence of probability of venereal disease.

It was concluded that psychiatric facilities can be used advantageously in connection with a venereal disease clinic to decrease, modify, or eliminate promiscuity and resultant venereal disease among a suitable group of female patients who have been selected carefully and who voluntarily make use of treatment service. In addition, it was recommended that psychiatric treatment should be made available to promiscuous male patients who are in need of counselling.

DEATHS

Dr. Glenn Bartlett, Sr., died August 27, 1945, at his home in Falfurrias, Texas, of coronary thrombosis.

Dr. Bartlett was born July 12, 1873, in Conway, Ark., moving with his parents to Texas when he was a boy. He received his medical education at Tulane University, being awarded his degree in 1903. He later took post-graduate work at the Chicago Lying-In Hospital and at Tulane. After his graduation, Dr. Bartlett began the practice of medicine in Shafter, Texas. He then spent some time in the state of Chihuahua, Mexico, before moving to Kingsville, Texas, where he practiced until World War I, during which he served as a major in the Army Medical Corps. For the two years immediately following the war, Dr. Bartlett was surgeon for an oil company in Maracaibo, Venezuela. He returned to Texas and settled in Harlingen, where he practiced until

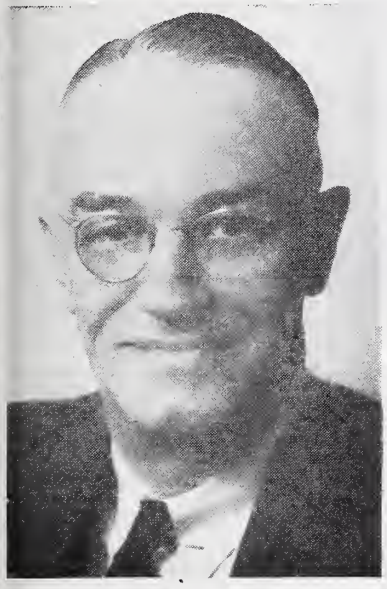
1940, at which time he moved to Falfurrias, remaining there until his death.

Dr. Bartlett was a member of the State Medical Association and American Medical Association, through the Presidio County Medical Society, the Kleburg County Medical Society, the Cameron County and Cameron-Willacy Counties Medical Society, and the Brooks-Duval-Jim Wells Counties Medical Society, depending upon his residence. He was president of the Brooks-Duval-Jim Wells Counties Medical Society in 1942. He was also a member of the Southern Medical Association. Dr. Bartlett was a Methodist and a thirty-second degree Mason, being a member of the Alzafar Temple of San Antonio.

Dr. Bartlett on April 2, 1903, married Miss Mary Jackson Haynes, of Fayetteville, Tenn., who preceded him in death two years ago. He had married again, and is survived by his wife, the former Miss Andrea Salas, and three children of his first marriage: Dr. Glenn Bartlett, Jr., Falfurrias; Mrs. Gerald Fry, San Antonio; and Mrs. A. L. Daniels, St. George, S. C.

Dr. Thomas Eugene Dunnam, of Houston, died August 29, 1945, following several years of ill health. He had a posterior coronary occlusion in 1940, but had continued in practice most of the time since until his death.

Dr. Dunnam was born December 2, 1884, at Hufsmith, Texas, the son of William James and Josephine (Collins) Dunnam. He attended the public schools of Conroe, and was graduated with a degree in medicine from the Medical Department of the University of Texas, Galveston, in 1912. He practiced medicine first at a sawmill near Spring and Fostoria, later building a small hospital in Spring. In 1921, he moved to Houston, where he spent the remainder of his life. During the first World War Dr. Dunnam held the rank of captain, but did not serve overseas. He was a member of a Harris County Selective Service board during the second World War until forced to resign because of his health.



DR. THOMAS EUGENE DUNNAM

Dr. Dunnam was a member for many years of the Harris County Medical Society, State Medical Association, and American Medical Association. He was also a member of the Houston Academy of Medicine, the Southern Medical Association, and the South Texas District Medical Society. Early in his career his membership in the national and state association had been through the Montgomery County Medical Society. He had been either an active or honorary member of the staffs of Memorial, Methodist, Hermann, and Jefferson Davis Hospitals, Houston. He was a member of the Methodist Church, Phi Beta Pi medical fraternity, the Masonic order, Arabia Shrine Temple, and the Grotto Club.

Dr. Dunnam is survived by his wife, the former Miss Eleanor Elizabeth Wright, whom he married July 10, 1943, and by a daughter, Mrs. J. H. Kreimeyer, of Sweeney, and a son, Lt. T. E. Dunnam, Jr., stationed at the Naval base in Corpus Christi. Also surviving are four sisters, Mrs. Albert Traylor, Houston; Mrs. Bob Price, Boling; Mrs. Jake Ansley, Angleton; and Mrs. Brady Parrish, Fostoria; and one brother, George Dunnam, of California.

Dr. Thomas M. Jeter, of Fort Worth, Texas, died August 5, 1945, after a short illness.

Dr. Jeter was born in Van Zandt County in 1871, the son of Mr. and Mrs. Allen J. Jeter, who had come from Georgia before the Civil War. He received his academic education at Baylor University, Waco, and obtained his medical degree from the Medical Department of Baylor University, Dallas, in 1901. He began his practice at Hiram, Texas, moving from there to Wills Point. He soon located in Fort Worth, where he remained until his death with the exception of two years spent in Terrell between 1936 and 1938 as chief surgeon at the State Hospital. Throughout his career he took post-graduate courses at various centers including Tulane University, Eye, Ear, Nose, and Throat College in Chicago, Mayo Clinic, and University of Toronto.

DR. THOMAS M. JETER

Dr. Jeter had been a member in good standing, continuously since 1906, of the State Medical Association and American Medical Association, through the Tarrant County Medical Society. He was a member of the Baptist Church and a thirty-second degree Mason.

Survivors include two daughters, Mrs. R. R. Couch, Minneapolis, Minn., and Mrs. Grafton Houston, Green Bay, Wis.; three brothers, Dr. J. J. Jeter, Iowa Park; Dr. Drayton Jeter, Alpine, and Dr. Elias Jeter, Inverness, Fla.; and three sisters, Mrs. Nora Vaught, Anton, and Mrs. E. J. Cummerford and Mrs. Thomas Gilliam, both of Tyler.

Dr. Frank H. Rosebrough, of San Antonio, Texas, died September 16, 1945, of myocardial failure.

Dr. Rosebrough was born June 17, 1878, at St. Louis, Mo., the son of James W. and Margaret (Robinson) Rosebrough. He attended the public schools there and was graduated from Westminster College, Fulton, Mo. His medical education was secured from the St. Louis University Medical College, where he received his degree in 1904. He later studied in Vienna and other European centers. After serving an internship, Dr. Rosebrough began practice in St. Louis, turning to ophthalmology as a specialty. From 1914 to 1922 he practiced at Brownwood, Texas, removing in the latter year to San Antonio, where he remained until his death. He

was a member of the staffs of the Nix and Physicians and Surgeons Hospitals in San Antonio.

Dr. Rosebrough had for many years been a member of the American Medical Association and the Southern Medical Association. Upon moving to Texas he became a member of the State Medical Association, first through the Brown County Medical Society and then through the Bexar County Medical Society. He served the State Medical Association as chairman of the Section on Eye, Ear, Nose, and Throat in 1943. He was a Fellow of the American Academy of Ophthalmology and Otolaryngology and a member of the Texas Ophthalmological and Otolaryngological Society. He was particularly interested in microscopic and laboratory research of disease conditions of the eye. He was an elder in the Presbyterian Church and took an active part in church work.

Dr. Rosebrough was married in 1913 to Miss Rebecca Lyle, who survives. He is also survived by a brother, James W. Rosebrough, of San Antonio.

Dr. Stephen Thomas Turner, of El Paso, died August 7, 1945, following an operation for diabetic gangrene.

Dr. Turner was born June 17, 1856, on a farm in Oktibbeha County, Miss., the son of M. D. and Mary (Scarbrough) Turner. At the age of 16 he came with a neighbor's family to Hopkins County, Texas, where he worked on farms and attended school in Sulphur Springs, later teaching school. While earning money to go to medical college, which had long been his ambition, he studied medicine in the office of a Sulphur Springs physician. He was graduated from the medical department of the University of Louisville in 1882. Prior to graduation, he had begun practicing in Halesboro, Texas, but while he was away for his final year of college, most of the townspeople moved to a new site in Lamar County. Dr. Turner returned from the university to open an office in the new community, which he was responsible for naming Deport. After two years he left a thriving practice to move to Coleman, because of his health. Within a few years, Dr. Turner moved to Marfa, and then on to El Paso in 1889, remaining in that city the rest of his life.

Dr. Turner was throughout his professional life continuously a member in good standing of the State Medical Association and American Medical Association, through the El Paso County Medical Society. He served the State Medical Association as Councilor of the First District between 1903 and 1909, and as chairman of the Section on Gynecology in 1906. He was for many years physician and surgeon for the El Paso-San Antonio branch of the Southern Pacific Railroad. He served for several years as a member of the Texas State Board of Medical Examiners. He was known as a progressive physician, taking post-graduate courses in New York and keeping up with new discoveries in medicine and surgery. While Dr. Turner never lost interest in medicine, he gradually retired from active practice and devoted his time and energy to his farm "down the valley" from El Paso. He experimented with new farm products, raised fruits, melons, and pecans, and had almost every kind of domesticated fowl. He also kept a large lake well stocked with fish for the entertainment of his friends and himself. He was active in the management of the farm and in marketing its products until his last illness. He had been made a Mason during his residence in Halesboro and continued his affiliation with that order until his death. After fifty years of continuous membership in the El Paso Lodge, A. F. and A. M., No. 130, he was presented with a life membership card, lapel button, and badge.

Dr. Turner was married December 24, 1882, to Miss Anna Laurie Camp at Jonesboro, Ga. Two sons were born to them, but both died in infancy. Mrs. Turner died August 23, 1938. On September 19 1942, Dr. Turner was married to Mrs. Lucy Roberts of El Paso, who survives.

Under the terms of Dr. Turner's will, his home in El Paso will become the property of the El Paso County Medical Society upon the death of his wife or at any time she wishes to surrender it to the Society. The home, which is a Southern colonial mansion, will be used as a library and meeting place by the Society, which is deeply appreciative of this splendid bequest.

Dr. Glenn Shellhorn Weaver, of Big Spring, Texas died suddenly September 5, 1945, of cerebral hemorrhage.

Dr. Weaver was born December 1, 1890, in DuBois Neb., the eldest son of Dr. A. J. and Ella (Shellhorn) Weaver. He went with his parents to Concordia Kan., in 1893 when his father established practice there. He was graduated from the Concordia high school and had one year in the University of Nebraska and three in the University of Kansas School of Engineering before graduating from the University of Kansas Medical School in 1923. He had taught four years in high schools in Beloit and Larned, Kan. teaching general science mathematics and manual training, before taking his medical degree. He served a year's internship at St. Margaret's Hospital in Kansas City, Kan., following which he took a year's residency in a sanatorium for tuberculous patients in Wiemar, Calif. He then spent four years in general practice at Belpre, Kan., before turning to the study and care of patients with mental diseases, to which he devoted the remainder of his life. He spent five years as assistant superintendent of the State Hospital at Larned, Kan., coming in 1942 to Texas as assistant superintendent of the Big Spring State Hospital. He became superintendent August 1, 1945.

DR. GLENN SHELLHORN WEAVER

Dr. Weaver was a member of the State Medical Association and American Medical Association through the Ector-Midland-Martin-Howard-Andrews-Glasscock Counties Medical Society. He was also a member of the American Psychiatric Association. He was a member of the Methodist Church and a Mason. Chief among Dr. Weaver's many and varied interests were guns and cameras. He developed and printed his own pictures and made miniatures, slides, enlargements, stereographs, Kodachromes, and movies.

Dr. Weaver was married to Miss Nellie Lareau, of Cabool, Mo., on July 1, 1930, in Wichita, Kan. Surviving are his wife and one son, Harold L. Weaver, age 14; three brothers, Dr. Ross E. Weaver and John S. Weaver, of Concordia, Kan., and Richard G. Weaver, of the Marines; and one sister, Mrs. Roscoe E. Kimmerling, of Humboldt, Kan.

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

President Truman's National Health Program, announcement of which was made on November 19, came as a bombshell to all who were complacently assuming that Federal efforts to force a system of compulsory sickness insurance on the people of the United States had been or were being effectively stymied. The announcement has served one splendid purpose. It has activated and unified the medical profession of this country to the high purpose of preventing the regimentation of medicine and the public as no other action could have done. The blessing of the President of the United States, the leader of the Democratic party, on the institution of compulsory sickness insurance for every man, woman, and child in the nation is sobering indeed to the enthusiasm of those who have hoped and expected that the Federal legislation pending to that end had been again buried in Congressional committees to which it has been referred.

The President's message to Congress presenting a National Health Program was built around what he chose to call five basic problems, the solution of which he urged is necessary to "reach the health objectives of our economic bill of rights."

The first of these dealt with the number and distribution of hospitals. The recommendations of the President with regard to this problem are adequately covered by the Hill-Burton bill (hospital and public health facility construction bill), which has been approved by the American Medical Association and the Legislative Committee of our own Association.

The second problem referred to by the President—expansion of public health services and maternal and child care—points to the nefarious Pepper bill, which would make available to the general population, without consideration of financial need, the provisions of the EMIC program, a war measure for the wives and children of the lower grades of enlisted personnel of the armed forces.

The third point in the President's program called for taking over by the Federal Government of medical education and medical research, particularly in the fields of cancer and mental health. It is odd that such action would be contemplated in a country which has outstripped the world in these fields as a result of unfettered, unregimented medical education and research. The progress made in the coördinated war effort in these fields was the fruit of an independent system inspired by the highest patriotism, and not the result of regimentation.

The fourth point in the President's message called for a system of compulsory sickness insurance for the people of the United States — for which Senators Wagner and Murray, and Representative Dingell have bent their talents and energies during the last two sessions of the Congress, and to which American medicine stands unalterably opposed as detrimental to the high quality of medical care now available because of independent practitioners and a free public.

The last point in the President's program had to do with compensation for loss of wages due to sickness. The medical profession has always approved insurance of this type.

In summary, American medicine is on record as favoring two of the points in the President's program and is definitely opposed to three. While the greatest respect and the highest regard must always be given recommendations of the President, after all he is but a man, and in the Democracy which all Americans cherish, it is the obligation of medicine, because of its qualifications, to continue its leadership in protecting the public against legislation which would destroy the finest type of medical care now available anywhere in the world.

The New Wagner-Murray-Dingell Bill.—On November 19, immediately following President Truman's message to Congress proposing a National Health Program, Senators Wagner and Murray introduced a new measure in the Senate, S. 1606, carrying provisions for legal enactment of the recommendations of the President. While this new bill is patterned after the 1945 version of the Wagner-Murray bill, and is just as objectionable to the views of medicine, it has been altered in a few particulars and in a most interesting way. First, and most important, the adroit authors have eliminated any provision for financing the proposed system of compulsory sickness insurance and other so-called "benefits" of the measure. The reason is obvious —the measure thus escaped referral to the Finance Committee of the Senate where all revenue raising measures go in that body, and, instead, was referred to the Senate Committee on Education and Labor, of which none other than Senator Murray himself is chairman. On the same date, Representative Dingell introduced a companion measure in the House, H. R. 4730, which, as a result of its freedom from revenue raising, permitted its referral to the House Committee on Interstate and Foreign Commerce, of which Representative Lea, of California, is chairman.

The first 1945 Wagner-Murray-Dingell bills, S. 1050 and H. R. 3293, had been in the hands of the Senate Committee on Finance, and the House Committee on Ways and Means, where they properly belonged as revenue-producing measures to pay the stupendous costs of their so-called "benefits."

Senator Wagner has ingeniously reached the conclusion that "It is both necessary and desirable that first and foremost consideration should be given to the *benefits*. (Italics ours.) He opines that "If the Congress thinks that it is sound to provide prepaid medical care to the American people, the method of financing such a plan can be worked out jointly by the appropriate committees of the Congress which have jurisdiction over these matters." Thus, as a result of political maneuvering, the new bills now rest in Committees from which action may be surely expected, and an effort has been made to shelve temporarily the bugaboo of the tremendous tax burden which their enactment into law would make necessary.

The new bill omits some thirty-one pages proposing a hospital building program, two pages dealing with child welfare services, and approximately eighty pages proposing extended unemployment and disability benefits, retirement, survivors, and extended disability benefits, social insurance contributions, and special credits for military service. In other words, it has been streamlined, so to speak, to attempt to get action on the authors' principal objective—a system of compulsory sickness insurance, regimenting all who render and all who receive medical care in the United States, *without* specifying how the gigantic cost of such a program is to be paid. Fortunately, the two preceding Wagner-Murray-Dingell bills made this perfectly clear.

The bill is divided into two titles. Title I, Grants to States for Health Service, contains three parts: Part A—Grants to States for Public Health Services; Part B—Maternal and Child Health Services, which of course includes services for crippled children; Part C—Grants to States for Medical Care of Needy Persons.

Title II provides for Prepaid Personal Health Service Benefits.

Under Part A, Title I, the existing limitation on the amount of Federal appropriation that may be made annually for public health work, $20,000,000, would be removed, and a new definition of "public health work" is set forth, including among many other functions protection of health in maternity, infancy, and childhood; control of communicable diseases, and laboratory services, the extent of which procedures is subject to various and different interpretations as to their meaning.

Under Part B, Title I, the existing limitation of Federal annual appropriation for maternal and child health services, $5,820,000, is removed. It requires that state plans must make available facilities for local maternal and child health services.

Under Part B, Title I, the existing limitation of Federal annual appropriation for services to crippled children, $3,870,000, is removed, with similar provisions for state plans.

It is patent that removal of existing limitations on annual Federal appropriations for

health services is to make way for the gigantic cost of Federal, regimented medicine and all of its political implications.

The new Wagner-Murray-Dingell bill contains all the obnoxious provisions of its predecessors, providing for panels of patients for participating practitioners; limitation of the number of patients to be served by participating practitioners; the designation of those who may call themselves specialists and the qualifications of specialists—all under the authority of one man—the Surgeon General of the U. S. Public Health Service.

Methods of payments for services either on (1) fee for service, according to a fee schedule, (2) on a per capita basis, (3) by salary, or (4) a combination of the methods named, remain the same as in previous measures, all subject to the approval of the Surgeon General of the U. S. Public Health Service.

A significant provision is that rates of payment for particular services or classes of services "may be nationally uniform *or may be adapted to take account of relevant regional or local conditions and other factors.*" (Italics ours.)

Space prohibits further discussion of the detailed provisions of the bill. Physicians are urged to secure copies from their Congressmen, inform themselves and take appropriate action.

President Truman has joined with Senator Wagner in voicing the opinion that such legislation would not constitute the socialization of medicine. We quote herewith the concluding paragraph of the splendid editorial discussion of this subject in the December 1, 1945, *Journal of the American Medical Association,* which succinctly states the opinion of American Medicine with regard to the matter.

"No one will ever convince the physicians of the United States that the Wagner-Murray-Dingell bill is not socialized medicine. By this measure the medical profession and the sick whom they treat will be directly under political control. By this measure the great system of private hospitals and community hospitals that have grown up in our country will depend for their continued operation on funds paid to them by a federal government agency. By this measure the philanthropic efforts for the care of the sick, which have been the pride of our nation, will be forever deterred. Through this measure competent young men who would enter the medical profession will be forced to seek other fields of action still remaining under our democracy which still permit the exercise of individual initiative and freedom of thought and action. By this measure doctors in America would become clock watchers and slaves to a system. Now, if ever, those who believe in the American democracy must make their belief known to their representatives, so that the attempt to enslave medicine as first among the professions, industries or trades to be socialized will meet the ignominious defeat it deserves."

Views of the Texas Congressmen on the 1945 Wagner-Murray-Dingell Bills were published editorially in the October, 1945, number of the JOURNAL (pp. 282-285). These views were expressed in letters to the Executive Secretary of the Association in response to letters asking for such statements and for permission to publish them in the JOURNAL for the benefit of members of the Association. Unfortunately, the letters from the State Association Secretary were received in Washington at about the time of the summer recess, which accounted for some of them failing to reach the attention of those addressed.

Despite that fact, replies received from seventeen of the twenty-three members of Congress from Texas were frank, unequivocal declarations of opposition to socialized medicine in general and the Wagner-Murray-Dingell bills in particular.

We are pleased to publish here a statement from the Honorable George H. Mahon (Colorado City) 19th District (Andrews, Bailey, Borden, Cochran, Crosby, Dawson, Dickens, Floyd, Gaines, Garza, Hale, Haskell, Hockley, Howard, Kent, King, Lamb, Lubbock, Lynn, Martin, Mitchell, Scurry, Stonewall, Terry, Yoakum Counties):

"In your letter of October 27th you make reference to the Wagner-Murray-Dingell bills and inquire of my attitude toward socialized medicine.

"I am unalterably and unqualifiedly opposed to socialized medicine, have always been, and have frequently stated my position in personal conversations or in correspondence with doctors and other friends in my Congressional District. I feel confident that my views are well known among West Texas doctors and the people of my District.

"In a letter to the National Physicians' Committee under date of March 29, 1944, I stated 'I am definitely opposed to socialized medicine, and I would not support legislation providing for the regimentation of either doctor or patient. In my judgment the public interest is best promoted by a policy of freedom on the part of both the doctor and the patient.'

"On April 5, 1944, you wrote me, commending me for my views, stating: '. . . . if we again editorialize on the subject, we will take the liberty of quoting your letter. . . . .' I have in no way changed my views, and I am sorry that I did not know that you were again editorializing on the subject.

"In your letter of October 27th you state that some time ago you wrote me and requested a restatement of my views for publication in the TEXAS STATE JOURNAL OF MEDICINE. I was out of my Washington office for a couple of months this summer, and I regret that the letter was never received, or was never called to my attention.

"It is always a pleasure to hear from you and the State Medical Association."

Thus, another Texas Congressman, of whom we can be proud, reaffirms his opposition to socialized medicine. As Texas leadership was manifested on land and sea in the great global conflict recently concluded, we may with assurance expect similar leader-

ship in the forthcoming battle to force a system of Federal regimented medicine and regimented public looming in the halls of Congress. We have faith in that leadership and in the outcome of the battle.

Texas Hospital Intern and Resident Staffs are rapidly reverting to a peace time basis, in accordance with a reconversion program recently agreed to by Procurement and Assignment Service and the Surgeons General of the Army, Navy, and U. S. Public Health Service.

Since January, 1943, hospitals have been using commissioned medical officers of the Services in what was known as the 9-9-9 program, also as a result of an agreement between the Surgeons General of the Services and Procurement and Assignment Service. In that program all hospitals in the United States approved for intern training were allocated quotas of interns and junior and senior residents they might have on the basis of numbers of beds, records of previous hospital service, and other pertinent factors. Unapproved hospitals for intern training, on the basis of services rendered, were in certain instances given resident quotas. Under this program, through an agreed-to arrangement, hospitals could appeal for the deferment of commissioned medical officers in the Army, Navy, and Public Health Service, who had just completed their medical education, to serve periods of nine months internship; to be followed by appeals for a lesser percentage of such medical officers to serve nine months junior residencies; and that to be followed by appeals for a still lesser percentage to serve nine months senior residences. All these appeals were made in accordance with definite, prescribed regulations through State Chairmen to the Executive Board of Procurement and Assignment Service at Washington. That board dealt directly with the Surgeons General in each case, who alone had authority to grant the deferments asked for.

Under date of November 5, the central office of Procurement and Assignment Service issued a directive to all State Chairmen, advising that the 9-9-9 program would be reconverted to a peace time basis as rapidly as possible, and complete directions were given to pass on to hospitals for their guidance in the matter.

Fortunately, the Assistant Executive Officer of Procurement and Assignment Service. Washington, visited Texas just before the reconversion program was to be put into effect, and a conference and roundtable discussion of all problems presenting in the matter was held with representatives of Texas hospitals, the Assistant Executive Officer, Dr. Howard Kline of Washington, D. C., and the Vice-Chairman of Procurement and Assignment Service for Physicians in Texas. This conference was held at the Roosevelt Hotel in Waco, November 12, immediately preceding a called session of the House of Delegates of the State Medical Association in that city.

In the reconversion program, hospitals are urged to begin at once to appoint veterans (returned medical officers) to every resident staff position possible, so that, with rare exception, every current military resident can be called to active duty as promptly as possible. As soon as a veteran has been adequately trained to replace a commissioned officer resident, the latter will be called to active duty at once without regard to whether or not he has completed the full term of his present deferment. Hospitals have been asked to notify promptly the State Chairman for Physicians of the Procurement and Assignment Service, of the availability of such officers for active duty.

In the reconversion program, all medical officers on inactive duty now serving internships will be permitted to serve twelve instead of nine months, as under the 9-9-9 plan. Thus interns who would have completed their nine months on April 1, 1946, will continue their internships until July 1, 1946, provided hospitals in which they are serving can accommodate the overlapping quota for the period of three months (April 1 to July 1) of both old interns and the new group. If hospitals cannot do this, some interns will be called to active duty after only nine months. In rare instances the Surgeons General may permit an extension beyond twelve months.

Medical officers who will complete their medical education on May 1, June 1, and July 1, 1946, will be permitted to serve internships until July 1, 1947, in order to return as rapidly as possible to the July to July twelve months internship; provided, of course, that hospitals in which they are serving can accommodate a double quota of interns for a short overlapping period, as above referred to.

Medical officers on inactive duty serving as junior residents in the April group will be called to active duty as soon as they can be replaced by a returning medical veteran, and not later than July 1, 1946, except in extremely rare cases. Those who would complete their junior residencies on May 1, June 1, and July 1, 1946, will be called to active duty on those dates if they have not already been replaced by a returning medical veteran.

Medical officers on inactive duty serving

as senior residents who will complete their residencies on April 1, 1946, will be called to active duty on that date if they have not already been replaced by a returning medical veteran. Senior residents completing residencies on May 1, June 1, and July 1, 1946, will be called to active duty on those dates if they have not already been replaced by returning medical veterans.

The attention of hospitals and of commissioned officers now serving as residents has been called to the fact that any contracts between residents and hospitals are wholly subsidiary to their legal obligation to the Army and Navy, and that any medical officer on inactive duty in a resident capacity is subject to active duty orders at the discretion of the Surgeons General.

Provision is made in the reconversion program for the exchange of medical officers in the Army who have been on active duty for two years or more, who are now in continental United States, and who are agreeable to accepting appointments to hospital residencies. These will be exchanged for any medical officers serving residencies on inactive duty status, before the termination of such residencies, provided hospitals make such requests in accordance with the prescribed procedure under War Department Circular 296, through Procurement and Assignment Service. This method of replacement does not apply to medical officers on duty with the Navy.

The whole purpose of the reconversion program is to return to a peace time basis as rapidly and as painlessly as possible as far as efficient resident staff services in civilian hospitals are concerned, and, most important, to expedite the return to civilian status of medical officers who have rendered patriotic, sacrificial services to their country in war. They are thus given an opportunity to refresh themselves in civilian hospital practice before returning to their former civilian practices.

We cannot close this extended discussion without expressing deep appreciation of the fine coöperation of Texas hospital administrators, hospital medical directors, and intern and resident staff committees in the operation of the 9-9-9 program during the war. Their wholehearted coöperation made the program effective and successful in Texas, as we are sure it was elsewhere. They will render the same fine services in the reconversion program.

Finally, Procurement and Assignment Service would have long since been abandoned following V-J day, if it did not still need to function in connection with the hospital intern-resident program, and to help expedite the release of medical officers to return to areas where they are critically needed for community medical care. This need is rapidly being met. The medical profession of this country can justifiably take pride in the job that it voluntarily assumed to see to it that a fair and equitable distribution of doctors was made available under the most stringent war time conditions to combatant forces of the United States on every front, for industry, public health, and the civilian population. Despite the tremendous task, carping criticism from ready fault finders, and some admitted mistakes, it did a good job, better than could possibly have been done by any paid agency of the Federal Government.

The State Board of Health Advisory Council, appointed in connection with a proposed survey of Texas to determine hospital and public health facility needs, provided federal funds become available from passage of the Hill-Burton bill now pending in Congress, was enlarged November 8 by the addition of the following members of the State Medical Association, upon the appointment of Governor Coke Stevenson: Drs. H. F. Connally, Waco; Holman Taylor, Fort Worth; S. E. Thompson, Kerrville; C. E. Scull and John H. Burleson, San Antonio; H. E. Griffin, Graham, and R. B. Anderson, Fort Worth.

In discussing the Hill-Burton bill in these columns in the November JOURNAL, it was pointed out that, in anticipation of the passage of the Hill-Burton bill, which apparently is favored by all who are concerned with medical and hospital care and public health in the United States, Governor Stevenson designated the State Board of Health as the state agency responsible in Texas for carrying out the provisions of the bill if and when enacted into law. The Governor appointed at the same time an Advisory Council to the State Board of Health, as provided for in the bill. The first appointees to the Council were six prominent administrators of Texas hospitals, one of whom is a physician, widely and favorably known in the state and a member of the Board of Trustees of the State Medical Association. The seventh member of the original group, not a hospital administrator, is an Austin attorney, who has served for a number of years as legal counsel to the Texas Hospital Association.

As was pointed out in these columns in the November JOURNAL, the Legislative Committee of the State Medical Association, after considering the Hill-Burton bill, concluded that any study of hospital and public

health facility needs in Texas is a very proper function of the State Medical Association. Therefore, the Legislative Committee petitioned the Governor, by resolution, to add to the Advisory Council, ex-officio, the President and Secretary of the Association, the chairman of the Board of Trustees, chairman of the Board of Councilors, chairman of the Legislative Committee, chairman of the Council on Medical Economics, and chairman of the Public Relations Committee. The Governor graciously received the request and advised that he would confer on the matter with the State Board of Health. It is pleasing to report that the State Board of Health unanimously supported the petition that official representation from the State Medical Association to the Advisory Council be added as requested, and that official endorsement of the addition was likewise given by the Texas Hospital Association.

The purpose of the request that the appointment of representatives from the Association to the Council be made ex-officio, is that in the event of changes of office, outgoing officials may resign and the Governor will then be requested to appoint their successors.

The Advisory Council is now composed of the following: Mrs. Josie Roberts, Methodist Hospital, Houston; Lawrence R. Payne, Baylor Hospital, Dallas (President of the Texas Hospital Association); E. M. Collier, Hendrick Memorial Hospital, Abilene; Sister Mary Evangeline, Hotel Dieu Hospital, Beaumont; Dr. Truman Terrell, Fort Worth; Mrs. Alfreda Hassel, M. & S. Hospital, San Antonio; Philip R. Overton, Austin, and the seven representatives, ex-officio, from the State Medical Association previously named.

The Advisory Council held its first meeting in Austin, December 9, at which time it was organized with the following officers: Mrs. Josie M. Roberts, Houston, chairman; Dr. H. F. Connally, Waco, vice-chairman; Lawrence R. Payne, Dallas, secretary. On December 10, the Council met with the State Board of Health at Austin, for consideration of the provisions of the Hill-Burton bill as it now stands. It is anticipated that a proper survey will require at least a year if not eighteen months. If no changes are made in the financial provisions of the bill it is figured that the sum of $8,587,000 will be available for the hospital and public health facilities construction program in Texas, of which amount $5,238,000 will be furnished by the Federal government and $3,349,000 by the State. Until the Legislature makes a specific appropriation for the survey, funds would necessarily have to come from other sources. It is considered highly desirable to initiate the survey at the earliest possible moment. One or more states have already completed their surveys in anticipation of the passage of the bill.

This legislation, which has been approved in principle by the American Medical Association and the Legislative Committee of our Association, may go far toward solving the problem of better distribution of medical and hospital care if its provisions are wisely administered. If hospitals are built where they are needed and where communities can economically support them, they may attract young and competent doctors to these communities who will continue to advance in their professional services to the public. If public health facilities are provided where they are needed and where communities will support them, public health in Texas will be improved. If, on the other hand, diligence and care are not exercised, economic waste could result from a well intentioned program.

It is believed that Texas Medicine with its hospital colleagues and coöperative public-spirited citizens will meet this challenge to insure the achievement of the practical ideals embodied in the Hill-Burton bill when it is enacted.

A Called Meeting of the House of Delegates of the State Medical Association was held at Waco, November 13, 1945. The purpose of the meeting as stated in the official call issued by President Dr. Connally was to attend to any business proper to be considered at such a meeting under the Constitution and By-Laws of the Association, which provision definitely limited the scope of action of the meeting.

There had been a postcard petition, directed to the State Secretary, for a meeting of the House of Delegates, attempting to provide for a postponed regular annual session of the House of Delegates, permitting the election of officers, receipt and action upon reports, and other items of business. President Dr. Connally issued such a call as he considered was within his province to issue. It will be recalled in this connection, that the regular annual session of the House of Delegates this year had been prevented by war restrictions, and that the General Attorney of the State Medical Association had ruled that officers elected at the last annual session would remain in authority until another regular annual session could be held.

The predicament thus produced posed many problems in addition to that, the answers to none of which were apparent. Hence the first called meeting of the House of

Delegates of the State Medical Association since 1903, at which time the House met in Austin, at the call of President F. E. Daniel, to consider the State legislative situation. Reminiscing a bit further, it may be said that it was at this meeting that the present Medical Practice Act, which was passed in 1907, had its inception.

The Transactions of the Waco meeting will be found in this number of the JOURNAL, beginning on page 416. While the activities of the House at this meeting were not very extensive, they were very important, and quite interesting. The Transactions are well worth reading.

The most important decision made at the meeting was to continue the present administration in authority until the next regular annual session of 1946, which means that the present Council on Scientific Work, for one thing, will immediately begin to prepare the scientific program for the session, and the Executive Council of the Association will immediately take under consideration the problem of the time and place for a regular, full-dress session of the Association. It may be assumed that this session will be held at the usual time, and in the city which offers the best accommodations.

Perhaps the next most important act of the House was the election to Honorary Membership of all those who had, since the last meeting of the House of Delegates, been nominated by their respective county societies for that status.

Two amendments to the Constitution of the Association were adopted, one of them (to Section 1, Article II) being the basis for the present By-Law pertaining to Military Memberships, and the other (to Section 2, Article I) serving as a constitutional basis for the By-Law which now gives county medical societies the right to regulate fair dealings among their members, a factor which entered prominently in the trial of the now noted case against the American Medical Association, the District of Columbia Medical Society, and the Harris County Medical Society, some years ago. These amendments had been introduced and tabled at the preceding annual session of the House of Delegates, and were eligible for consideration at any time after the expiration of one year, which year had long since expired.

The transactions of the Executive Board of the Woman's Auxiliary to the State Medical Association, held in San Antonio, September 26, will also be found in this number of the JOURNAL (pp. 433-438). Thus this becomes the annual Transactions number for 1945, in lieu of the usual June Transactions number.

CURRENT EDITORIAL COMMENT*

The Limitations of Electrocardiography.—During the past twenty-five years the science of electrocardiography has been developed to the point where it has become an important and valuable adjunct to clinical medicine. In more recent years its use in clinical medicine has become widespread. Coincidentally, and perhaps inevitably, with the increased application of electrocardiography there has developed a tendency toward serious misuse of this valuable and useful method. The major cause for the abuse of the electrocardiogram is that the limitations of the method have not been properly recognized. The frequency with which serious errors in medicine are made because of unjustified conclusions reached from the interpretation of the electrocardiogram is alarming. This situation cannot be expected to improve until there is a more general realization of the limitations of electrocardiography.

The electrocardiogram may be of real value in the detection and classification of the cardiac arrhythmias and in the recognition of acute myocardial infarction. It may also be of value in determining when the heart has become involved during the course of certain systemic diseases, such as acute rheumatic fever and diphtheria, and in revealing the influence of certain drugs, of which digitalis is a notable example. When too great reliance is placed upon the electrocardiogram in conditions other than those mentioned above, the chances for error rise precipitantly.

There are several reasons why electrocardiograms are frequently misinterpreted. First of all, it is now becoming apparent that the present standards of normality for the electrocardiogram are incorrect. Far too many normal, healthy, young adults show changes which, according to present standards, are diagnostic of heart disease.[1, 2] Eighteen per cent of Stewart and Manning's 500 normal, healthy air crewmen showed changes in the electrocardiogram which, according to present standards, classified them as doubtfully or definitely abnormal. Until the present criteria for normality are revised, minor changes that may occur in normal individuals should be disregarded when there is lack of clinical correlation. In fact, any electrocardiographic changes should be viewed with skepticism when the findings cannot be correlated clinically with the patient.

Secondly, there is a widespread belief that

*This department of the JOURNAL presents editorial comments on current items pertaining to the science, art and practice of medicine, contributed by members of the State Medical Association and scientists closely associated with the medical profession of Texas. Invitation is hereby extended to any member of the State Medical Association of Texas to submit such discussions for this department. The discussions should not be more than 500 words in length.

changes in the QRST complex, especially the ST segment and the T wave, are specific for myocardial disease. This mistaken belief is probably responsible for the greatest number of the more serious errors of interpretation. That these changes in the QRST complex are decidedly not specific for myocardial disease is shown by the fact that similar changes have been described in over forty conditions in which primary disease of the heart does not exist.[3]

Finally, other errors in interpretation are made when physicians attempt to evaluate cardiac function and to estimate prognosis on the basis of electrocardiographic findings. That this is impossible is recognized at once when it is recalled that the electrocardiogram may often be normal in the presence of severe heart disease and may occasionally be abnormal in the absence of heart disease.

It seems clear, then, that a more widespread recognition of the limitations of electrocardiography is desirable. General appreciation of the limitations of the method will make for more rational interpretation and will avoid many of the errors that now occur.

REFERENCES

1. Graybiel, A., McFarland, R. A., Gates, D., and Webster, F. A.: Analysis of Electrocardiograms Obtained from 1,000 Young Healthy Aviators. Am. Heart J., 27:524-549 (April) 1944.
2. Stewart, C. B., and Manning, G. W.: Detailed Analysis of Electrocardiograms of 500 R. C. A. F. Aircrew. Am. Heart J., 27:502-523 (April) 1944.
3. Sensenbach, C. W.: Unpublished data.

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BLOOD VESSEL RUPTURE IN BRAIN

The threat of recurrent hemorrhage and death in approximately 70 per cent of all patients with subarachnoid hemorrhage, a rupture of small blood vessels in the brain, could be removed if it were possible to treat patients effectively and safely by surgery during the first two weeks after the hemorrhage, according to a study reported in the November 10 issue of *The Journal of the American Medical Association.*

George A. Wolf Jr., M. D., Helen Goodell, B. S., and Harold G. Wolff, M. D., New York, wrote that "29 per cent of patients who enter the hospital with subarachnoid hemorrhage die during the first episode of bleeding; 14 per cent die during recurrent bleeding between the second and the fourth week after the initial hemorrhage, and an additional 5 per cent die by the end of the first year."

The authors, who studied 46 patients with subarachnoid hemorrhage at the New York Hospital, said the symptoms included "sudden violent headache, dizziness and vertigo, vomiting, drowsiness, stupor and coma, stiff neck and pain in the back of the thighs and legs, tightness of these areas, sweats, and chills."

The investigators concluded from their studies that if patients survived the first year they had a good chance of a relatively long survival, "but the threat of repeated hemorrhage is always present."

SHOULD OUR DOCTORS BE REGIMENTED?*

R. L. THOMAS
DALLAS, TEXAS

I was glad to accept the invitation of the State Medical Association of Texas to speak tonight on the question of the proposed regimentation of doctors in Texas and throughout the United States by federal statute. The regimentation of doctors, the placing of them and their practice under federal control and federal payment is sought by the Wagner-Murray-Dingell bills which are now before Congress and which are shortly to be considered for passage.

I want you to know that I am not speaking in defense of the medical profession, for this great humanitarian profession needs no defense; the works and achievements of physicians in behalf of their fellow men, in the saving of human lives and the alleviation of untold suffering, speak for themselves. I am speaking tonight in behalf of a cause which I believe is much more important, a cause which transcends all personalities—the cause of the public health and welfare of Texas and the nation. It is my firm belief, and it is shared by many thousands of others who have studied this proposed federal legislation, that the adoption of the Wagner-Murray-Dingell bills would destroy the American practice of medicine as it is now constituted and which has been so signally valuable and successful down through the years. I believe that should Americanized medicine—the practice of medicine under the system of private enterprise—perish, the health of the nation will irrevocably suffer and the scientific progress of American medicine will be retarded for many years to come. These bills are an experiment which seeks to reconstitute the entire social service system of the United States. This experiment is being made at a critical time, at a time when the taxpayers of this country are hoping for some small relief from war time taxation. These bills, should they be permitted to become law, would place the greatest tax burden on the American people that any country in the world has ever imposed in days of peace.

The Wagner-Murray-Dingell bills are identical measures introduced simultaneously in both the House of Representatives and the United States Senate. They are now before

*EDITOR'S NOTE: Address delivered by Mr. Thomas, Dallas business man and member of the Board of Regents of the State Teachers Colleges of Texas, October 25, 1945, over the Texas State Network, composed of radio stations WRR, Dallas; KABC, San Antonio; KNOW, Austin; WACO, Waco; KFJZ, Fort Worth, and KTEM, Temple, as a public service. It was rebroadcast over Station KTHT, Houston, also a member of the network, on October 26. This address was the second in a series of radio talks arranged for by the Public Relations Committee of the State Medical Association of Texas.

committees preparatory to being submitted to a vote of Congress. In brief these bills seek to impose upon the public a tax on wages and salaries up to the first $3,600 a year paid or received after December 31, 1945. This pay roll tax deduction, it is estimated, would raise the stupendous sum of eight or ten billion dollars each year for the carrying out of the provisions of the bills. From each pay check 4 per cent is deducted by the government from the earnings of the worker, and the employer pays another 4 per cent, making 8 per cent in all. Self employed people pay 5 per cent up to the $3,600 a year maximum and federal workers would have 2.5 per cent deducted from their pay envelopes. Of the vast sum which would thus be raised, more than three billion dollars each year are earmarked for compulsory health insurance. The entire practice of medicine in the United States would be taken under control of the federal government, which would provide medical care, hospital care, nursing care, dental care, and other services such as laboratory work, to approximately 110,000,000 Americans, who would be on the next tax rolls for compulsory contributions. The bills contemplate that the administration of this three billion dollar health insurance fund be left in the hands of a single man, the Surgeon General of the U. S. Public Health Service. This, on the face of it, looks like a dangerous concentration of power, for everyone will admit that there's a whole lot of power in three billions of dollars. If misused, such power and authority would permit the employment of literally thousands of politically potent people all over the nation to enforce the provisions of these new and socialistic laws. These employees would naturally be politically minded, for after all their federal jobs would be political jobs. What a powerful political machine might be built up in this manner, with the health and welfare of the American people as the basis for its possible dictatorship! While such a political machine might *not* be created, there is no doubt at all but that the proposed laws would make such a machine not only a possibility but a probability. At any rate one does not have to be a deep student of political economics to realize the danger presented and the threat conveyed to the continuation of free enterprise and the American way of life.

I do not believe that the people of the United States are yet awake to the fact that this proposed federal legislation will affect the health and welfare of everyone of them. The bills, as written, are highly technical in their verbiage. They are of voluminous content, the size of an average novel. It is quite a task to read them and digest them. There is paragraph after paragraph and some of the most obscure of these paragraphs are the most potent in their effect on the American people.

It appears that the physicians of America, as well as the dentists, nurses, hospitals, and other individuals and organizations whose work affects the public health and welfare, are to be thoroughly regimented and placed under federal direction and control.

It appears very likely that you will have to bid goodbye to your family doctor in whom you have confidence and who has served you faithfully in time of trouble and illness over many years. The new federal law would undoubtedly prevent the free choice of physicians. The federal offices directing such doctors would of course provide physicians from their official lists to attend specified cases. You would have no assurance that you could secure the doctor of your choice, or the surgeon of your choice, or the specialist of your choice, or the hospital of your choice, in time of emergency. You might have to take what you could get and accept the doctor whom the federal medical office sent to you when you called for help, and go to the hospital selected for you. One thing is very certain, the time honored relationship between physician and patient and patient and physician which has been the heart and the core of American medical practice would be utterly destroyed by this law. I do not think, and there are thousands of other laymen who feel the same way as I do, that this experiment in socialized medicine should be attempted at this critical time in our nation's history. We are finding that the peace is not easy to win. We are finding that reconversion from war time to peace time is not as easy as it looked. We were willing and eager to pay the taxes necessary to help our gallant boys in uniform win the war, to provide them with the best weapons procurable, to aid them in any and every way possible. We are glad to pay all taxes necessary to bring these boys home, help them to re-establish themselves and to solidify a lasting peace. But are we willing to assume a new and tremendous tax burden, and to attempt an experiment in social revolution at a time when surely retrenchment in government spending is in order, and at a time when there is real danger in rocking the boat? I think not, for I believe that the days for regimentation of Americans of any group, class, or profession ended when the Japanese flag fell in the dust. Perhaps there was need of regimentation during the war, and certainly the people of the United States were willing to permit it for the common good. But now the war is over, and for the life of me I cannot see how card indexing all the doctors, placing all of them under federal jurisdiction and on federal listing so far as com-

pensation is concerned, can do any good to anyone, either the doctor or the public. Certainly this is no time to experiment with the safeguarding of the health of the nation.

Advocates of federal action say that something ought to be done to provide the public with health insurance. Something is already being done. The various insurance companies throughout the nation have already developed or are now developing low cost health insurance policies which will take care of entire groups and families. These policies provide medical care and surgical care. There is already a nation wide Blue Cross Hospital plan to which millions of Americans belong. There are many non-profit health and surgical care groups. These organizations, conducted as free enterprises, can provide medical care more readily and less expensively than could government controlled medicine. The physicians of the nation favor these various plans, for through such insurance, people who become ill or suffer accidents are afforded the wherewithal to pay their doctor bills and their hospital bills. There is no need of any compulsory government health insurance as long as legitimate, business-like insurance plans continue to grow and prosper and their prices remain within the reach of the small wage earner. Competition between the various insurance companies will keep the premiums down, and the type of service rendered up, and the various state insurance departments will see to it that no bogus or fly-by-night companies take the field. The doctors themselves in many instances are forming non-profit health insurance organizations. In Dallas County, the Dallas County Medical Society operates a highly successful and low cost health insurance plan.

Now don't think for a moment that the Wagner-Murray-Dingell bills propose to give anyone *free* health and hospital insurance. Your tax dollar would go to Washington. It would be used to pay thousands of employees in this vast governmental plan of federal medicine, before the doctor who treats you is paid. Your dollar, after going to Washington, would come back to you as about 50 cents to pay for medical care. It would seem more business-like, therefore, to keep your dollar in your pocket and buy health insurance from some commercial company or non-profit group and pay your doctor when you need him. In that way you would spend your entire dollar for insurance and medical care and get more for your money. You would not have to use more than half of your dollar to help operate this vast and unwieldy federal health plan and pay its multitude of employees. That looks like sense to me.

The health insurance offered under the Wagner-Murray-Dingell bills goes only to those who can pay for it through deductions from their pay envelopes. The government plan is not a great charitable plan which embraces aid to the helpless. The medical care which would be provided by the government would help only those who can help themselves. No provision is made to help the indigent, the mentally ill, the hopelessly crippled, the victims of tuberculosis or other diseases, who cannot help themselves and have no earnings from which a federal deduction can be made. As in the past these penniless unfortunates are left to the charitable care of the physicians of America, who in the future, just as they have done in the past, will continue to assume this burden without financial recompense.

I am opposed to the Wagner-Murray-Dingell bills because I am of the confirmed opinion that they will hamper free enterprise, continuance of which alone offers hope for this great democracy of the United States in these days of post war confusion. Now that the war is over and we have won the victory, Americans should not permit any kind of legislation, state or federal, to interfere with the resumption of the American way of life, so dear to us all. I thank you.

Dallas National Bank.

ORGANIC LESIONS RESULTING FROM EMOTIONAL STRESS

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Since Canby Robinson restated the problems arising from the fact that the patient is a person, and the Columbia and Temple University groups expounded a psychosomatic attitude to the patient, there has been a great increase in understanding of many important phases of human illness. There has also been a widespread misunderstanding of "what all the shooting is about." One hears doctors and interns using "psychosomatic" in the same sense as they used "psychogenic" or even "psychoneurotic" a few years ago. Such phrases as "His trouble is psychosomatic," or "She has psychosomatic colitis," as well as some of the published literature, show how completely the situation has been misunderstood by many physicians. On the other hand, some psychoanalysts have also twisted the term, and from their writings one may be led to believe that a satisfactory personality study makes consideration of the soma almost unnecessary but only by "analysis" can the personal factors in disease be investigated. Actually, psycho-

*Editor's Note—Dr. Dock was an invited guest of the Section on Medicine, State Medical Association of Texas for the Annual Session, scheduled for Galveston, May 8-10, 1945, cancelled because of war conditions.

somatic medicine merely emphasizes that in every case of ill health both the physical or organic factors, and the personal or emotional factors must be investigated, and that in management of patients neither of these aspects can be neglected or overemphasized. This is amphibious warfare, in which the unstable and constantly varying sea of emotions and the firmer but not unchangeable landscape of the cells both must be mastered to attain the objective.

At the outset it must be realized that while psychoneurotics eventually develop organic disease, and eventually die, they are not peculiarly susceptible to organic disease. They frequently tire easily and are aware of minor disturbances of health, but the diagnosis is made on the basis of a personality study, and the somatic inventory may make it possible to add "without evident organic disease or dysfunction." The same is true in neurasthenia, hypochondriasis, hysteria with apparent dysfunctions, and so on. In such cases, psychosomatic practice is to ascertain that all real dysfunctions and all possibilities of benefitting the patient by treating the soma have been explored and not omitted as useless in view of the obvious disturbance of personality. On the other hand, in the presence of conditions like mitral stenosis, chronic leukemia, or other organic disorder, the stresses imposed on the patient by the disease, by his past experiences and present environment must also be explored so that no opportunity to lessen his discomfort and improve his effectiveness is lost. Whether narcosynthesis, analysis, reports on the family and the job by social workers, or other aids to an understanding of the patient are invoked will depend on the type of case and the available skilled assistance. In a very large proportion of outspoken psychoneuroses, as well as in cases of organic disease with the usual personality problems, an alert and experienced physician can effect just as good results with a minimum of effort, as could be obtained by the most prolonged psychoanalytic or other specialized study and management. In some cases errors of the experts may be disastrous, but in a certain group failure of the usual management can be changed to a better result by the use of special technic for study of the psyche.

Psychosomatic studies have brought out the high frequency of certain types of personal history and emotional stress in specific organic diseases. In many cases it has not been proved that these correlations represent cause and effect, but merely that tendencies to develop specific disorders go along with the constitutions which predispose to certain patterns of behavior. This was well known to the ancients, who gave us such terms as "choleric," "melancholic," and "phlegmatic," which indicate disease tendencies and modes of behavior.

In other cases, the physiologic mechanisms by which emotional stresses lead to organic disease have been rather clearly shown. In many of these it remains to be proved that disease can be controlled more effectively by psychotherapy than by breaking the chain at other links, using medical or surgical methods. Yet in none of these can the emotional factors be ignored without risk of disaster.

It should be emphasized again that these problems are not correlated with psychoneurosis directly. Most of the patients who exhibit these disorders show no striking psychoneurotic traits. In many of them the causes of emotional stress are the trivial everyday situations with which modern man (and probably also primitive man) has to deal. The "life of quiet desperation" sets up a chronic strain, of which close relatives, friends, physicians, and the patient himself may not be aware. Similar or more severe stresses in others, or in the same person earlier or later in life, may have no appreciable physiologic effect. But at this age and in this person, resentment, frustration, dissatisfaction, or more rarely simple anxiety for security of fame, fortune, loved ones, or of life itself, may lead to organic dysfunction and eventually to organic lesions.

Nowhere is the unimportance of the intensity and character of the stress so apparent as in relation to age. Curiously, this has received comparatively little emphasis. The period of most intense stress is one almost free of those disorders which are recognized as the clearest examples of interference of psyche and soma. At the age from 10 or 11 to 17 or 18 the individual has all of his family stresses, his homo- and heterosexual stresses, his consciousness of social status, and of his loneliness in a vast universe most vividly impressed on him. Conflict with society and parents, without the child's escape into tantrums or tears, reaches an intense pitch. The personality may break, in hysteria or schizophrenia, and convulsive states may first become manifest, but arterial hypertension, peptic ulcer, Graves' disease, and other disorders of somatic function are relatively rare. Twenty, or even ten years later, they become more frequent, although the actual stress is far less and resistance to frustration better developed. Maturity and senescence see a constantly increasing incidence of dysfunctions and diseases of this type. By 60 nearly half the white population

and more than half the Negro population of America have hypertension of the labile type, fluctuating widely with trivial sensory or emotional stimuli.

It is true that in some of these people other evidence indicates that the outward response to minor emotional stimuli has become exaggerated also. Tears, furious outbursts, or other phenomena of this type are, however, the exception in patients whose peptic ulcers obviously become active, or whose diabetes becomes more severe, or whose arterial pressure reaches even higher levels at times when the stresses of life are most intense. In selected cases judicious medical management directed at minimizing the stress and the patient's response may be extremely effective, as may psychotherapy of more intensive and special types.

In other cases, section of the vagi at the cardia or of the thoracolumbar sympathetic nerves may be effective when psychotherapy, diet, and drugs have been entirely ineffective. Then again, elimination diets, or giving up cigarettes, may heal the peptic ulcer which has resisted all other management. Nothing could be more misleading than the assumption that dysfunctions which fluctuate with emotional stress are solely and wholly conditioned by the psyche. The psychosomatic approach is based on the duality or plurality of causation of many human illnesses, and the necessity of trying all things and using those that prove helpful.

All of us have seen, and not a few of us have been, young men who blushed with the least excitement or embarrassment, or even at the recollection of such episodes. We have seen, and perhaps been, young men down whose axillae sweat streamed whenever they were annoyed or alarmed by such events as physical examinations, school tests, dinner with prospective in-laws, and the like. These vasomotor and secretory responses to emotion, so apparent to all, give some indication of the mechanism of the continuous gastric secretory activity which leads to duodenal ulcers or the continuous vasospasms called hypertension. Like the former, these latter may arise, in properly constituted subjects, from a wide variety of unpleasant personal experiences. The subjects may manifest no other disturbances of function and present "normal" or "stable" emotional behavior, or any of the other types of reaction including neurosis.

The essential factor in organic disease due to emotional stress is not the character of the inciting situation, it is not the pattern of speech or conduct, but the physiologic response of the individual to any of a number of situations of unpleasant nature. The physiologic response may diminish with age, as is often the case with blushing or sweating of palms or axillae. On the other hand it may not manifest itself until maturity (duodenal ulcer due to gastric hypersecretion, migraine) and then disappear or diminish in old age. Or, as in the case of hypertension, it may most frequently manifest itself in senescence. With the steady rise in average age of our population, the importance of the latter group of organic expressions of emotional unrest is becoming constantly more evident. It includes many of the adult asthmatics, as well as a wide range of circulatory and digestive dysfunctions and some cases of endocrine or metabolic disorder.

It has been known for a long time, and was emphasized by John Hunter in the description of his angina, that joy and sorrow rarely cause organic disease or symptoms. Sorrow unalloyed with regret, guilt, or resentment may be intense and cause lassitude and loss of appetite, but it does not set in motion the autonomic activity which finally damages function. Anxiety about one's own safety or that of close friends or relatives also seems relatively innocuous unless overshadowed by resentment or guilt connected with the threat to life. In the same way, anxiety over financial affairs often is complicated by resentment directed at individuals, and anxiety over a son in the service by rancor over the neighbor's son who is somehow not in service but doing beautifully in safeguarding the other family's financial future. Machiavelli was right in saying, "A man will sooner forgive the murder of his father than the theft of his patrimony," because the property remains as a daily reminder of the man's loss and his wrongdoer's gain.

It is not likely that our control over the ills which develop because of vasomotor, secretory, or other vegetative and involuntary responses to dissatisfaction will soon be reduced by a decrease in man's inhumanity to man, or man's tendency to chew the bitter cud of discontent over fancied or real slights or failures. The technics for educating a person and minimizing his psychic trauma should be steadily improved and their applicability increased. The exact mechanisms by which certain persons over-respond after reaching maturity or senescence are being worked out rather thoroughly in some conditions; in others, such as asthma, the problems must be solved by future investigations. In certain disorders—myocardial infarction in the absence of hypertension—suggested relationships to psychic trauma have been hinted at but not proved. The interplay of allergic and psychogenic factors is extremely

obscure, but of great practical importance.

The psychosomatic attitude to disease will have its greatest value in conditions where organic disease follows and is dependent upon individual autonomic responses to the buffeting of human minds by the everyday friction of human existence. The analysis in each case of the psychic and organic elements and the recognition of groups of cases having common etiologic factors and a clearly defined physiologic mechanism leading to specific organic lesions offers opportunities in practice and in centers for organized investigation. Thomas Lewis' rule that "No doctrine is sufficiently supported if yet another serious argument may be urged in its favor" is particularly applicable in these fields of clinical science and should impel every physician to regard as inviting, but unproved, hypotheses based on anything less than the most complete possible study of the problem from every angle.

Already the teamwork of psychiatrist and internist, of physiologist and surgeon, has proved its value and produced persons combining well-rounded experience in several of these fields. All who are interested in medicine will find here the greatest challenge to professional skill and the greatest opportunity to "prolong life and diminish suffering."

340 Henry Street.

SALT INTAKE AND BLOOD PRESSURE

Rigid control of salt intake has been found helpful in lowering high blood pressure, according to a report in the October 20 issue of *The Journal of the American Medical Association.*

Six investigators—Arthur Grollman, M. D., T. R. Harrison, M. D., M. F. Mason, Ph. D., James Baxter, M. D., Joseph Crampton, M. D., and Francis Reichsman, M. D., of Dallas, Texas—severely restricted the salt in the diet of six patients. The blood pressure in two was reduced to essentially normal levels, while in three others there was a moderate reduction.

The authors, who are from the Department of Experimental Medicine of the Southwestern Medical College and the Medical Service of the Parkland Hospital, state that "the results thus far obtained would appear to indicate that in certain patients this form of therapy is decidedly beneficial."

Although experiments in controlling salt in the diet have been made at different times in France, Germany, and the United States, none has so far proved successful. The authors believe that they failed because of the employment of moderate, rather than drastic, restriction of salt in the diet. Moderate restriction, they state, usually fails to influence appreciably the blood pressure.

As yet, the effect of rigid salt control has not been studied during hot weather and the investigators believe that harmful effects may occur when sweating is excessive.

In conclusion the report says that "in view of the relative ease with which this method can be applied it seems to offer, for certain patients, the most practical and effective therapeutic measure now available."

PENICILLIN IN THE TREATMENT OF CONGENITAL SYPHILIS

E. E. WILKINSON, M. D., W. H. SAUNDERS, M. D.
AND
A. E. HANSEN, M. D.
GALVESTON, TEXAS

This is a preliminary report concerning twenty-nine infants and children with congenital syphilis who have received penicillin for the treatment of this condition in the Department of Pediatrics of the University of Texas School of Medicine from April, 1944, to May, 1945.

Study of evaluation of the possible effectiveness of penicillin in congenital syphilis was a cooperative venture, carried on under the auspices of the Committee on Medical Research of the National Research Council, in which our group collaborated with workers at Tulane and Johns Hopkins Universities and the University of Pennsylvania. At the beginning of the study it was agreed that two types of patients were to be treated with penicillin: (1) those with early congenital syphilis, previously untreated, whether any clinical manifestations were present or not; (2) those with late congenital syphilis, whether treated or untreated but with definite clinical manifestations. It was also agreed that the patients with early congenital syphilis were to receive 20,000 Oxford units per kilogram of body weight as the total dosage; this was to be given in divided doses of 60 intramuscular injections every three hours over a period of seven and one-half days. Patients with late congenital syphilis were to receive a dosage totaling 20,000 to 60,000 units per kilogram over a period of ten to twenty days; in these patients we used a total dosage of 20,000 to 30,000 units given in 80 intramuscular injections every three hours over a ten day period. Since November 7, 1944, all patients studied by us, with the exception noted in table 2, have received a total of approximately 40,000 units per kilogram.

The quantitative Kolmer complement fixation test is the standard test used in this hospital and was that employed in following the course of the disease in these subjects.

CLASSIFICATION OF CASES TREATED

Patients with early congenital syphilis were divided into two groups: those with definite manifestations and those that were asymptomatic (serological tests positive and family histories positive). Patients with

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The work described in this paper was done under a contract, recommended by the Committee on Medical Research, between the Office of Scientific Research and Development and the University of Texas.

late congenital syphilis were divided into three groups: those with interstitial keratitis, those with neurosyphilis, and one patient whom we list as miscellaneous. Table 1 shows the number of patients in each group. The results of treatment are discussed under the same categories.

TABLE 1.—*Classification of Patients with Congenital Syphilis Receiving Penicillin Therapy.*

Type of Congenital Syphilis	Number of Patients
Early, manifest	13
Early, asymptomatic	4
Late, interstitial keratitis	6
Late, neurosyphilis	5
Late, miscellaneous	1
Total patients treated	29

Early Congenital Syphilis, Manifest.—The case records of thirteen patients in this group are summarized in table 2.

It was in this group of patients that the most satisfactory results were obtained with penicillin treatment. In all infants in whom skin eruptions were present there was dramatic evidence of healing within twenty-four to forty-eight hours after institution of the penicillin therapy, and the lesions were completely healed by the end of the seven and one-half days of treatment. The rhinitis tended to persist longer, usually for about two weeks and in 1 case for four weeks. The bone lesions demonstrated by x-ray studies in this group showed a tendency to heal slowly after treatment, probably at about the same rate expected with the usual chemotherapy.

No dramatic serological reversals occurred, but there was a definite tendency for the titer to decrease over a period of weeks and months. In 1 patient the serological test became completely negative at 216 days after penicillin therapy was instituted and has remained so at 356 days; this is shown in figure 1. The spinal fluid Wassermann reaction was determined in 10 of the 13 patients in this group before treatment and was found to be positive in 5 of them. Immediately following the penicillin therapy the spinal fluid Wassermann reaction in these 5 patients decreased in titer, and in 1 it was found to be negative 135 days after the beginning of treatment.

TABLE 2.—*Summary of Data Concerning Thirteen Infants with Early Congenital Syphilis, Manifest.*

Case No.	Age in months	Manifestations: Skin lesions	Rhinitis	Osseous lesions	Other	Units of penicillin per kilogram	Evaluation of Results of Penicillin Therapy: Clinical	Serological
4	2	+	+	+	None	21,400	Skin lesions cleared rapidly; rhinitis gradually subsided.	Gradual decline in titer; negative at 216 days and still negative at 356 days.
6	5	0	0	+	None	20,500	No change at 24 days. Follow-up inadequate.	No change at 24 days.
7	5	0	0	+	Positive spinal fluid	15,000	Definite healing of osseous lesions at 135 days.	Decline in titer at 135 days. Spinal fluid negative at 135 days.
10	3	+	+	+	Nephritis (nephrotic syndrome)	18,000	Eruption and rhinitis healed during treatment; loss of edema (4 lbs. in wt.) at 10 days after penicillin; no evidence of kidney disease at 127 days; healing of bone lesions at 127 days.	Decline in titer at 129 days.
11	4	0	0	+	None	21,400	Signs of healing of bone lesions at 25 days.	No change in titer at 91 days.
15	7	+	0	+	Positive spinal fluid	21,900	Skin lesions healed during treatment; no change in bone lesions at 13 days.	No change in titer at 27 days. Improvement in spinal fluid at 13 days.
17	5	+	+	+	None	21,200	Skin lesions healed during treatment; rhinitis persisted for 4 weeks.	Slight decrease in titer at 45 days.
18	3	+	+	0	None	20,000	Skin lesions healed during treatment; rhinitis disappeared at 2 weeks.	Decrease in titer at 151 days.
24	2	+	+	+	Positive spinal fluid	43,100	Skin lesions healed during treatment; rhinitis at 2 weeks. No change in bone lesions at 12 days.	Decrease in titer at 55 days. Improvement in spinal fluid at 12 days.
25	4	+	?	+	None	109,000*	Skin lesions healed during treatment.	Increase in blood titer at 34 days.
26	6	0	0	+	Hydrocephalus & positive spinal fluid	40,400	No obvious change immediately following treatment.	Slight decrease in titer at 10 days. Improvement in spinal fluid at 10 days.
27	2	+	+	+	None	38,600	Skin lesions healed during treatment; rhinitis at about two weeks.	Slight decrease in titer at 45 days.
28	2	+	0	+	Positive spinal fluid	40,000	Skin lesions healed during treatment.	Decrease in titer of spinal fluid immediately after treatment.

*Case No. 25 was given the larger dose because the patient was admitted with a severe bronchopneumonia and treatment was primarily for this disease.

Early Congenital Syphilis, Asymptomatic.—In this group of 4 patients the ages varied from 13 months to 3 years. There were no manifestations of the disease demonstrable; thus clinical evaluation of the results of treatment was virtually impossible in these children. After the use of the penicillin a gradual decrease in the titer of the blood was observed in 3 patients. In the fourth child, it was impossible to make further titer studies.

Late Congenital Syphilis, Interstitial

Keratitis.—The results of treatment in this group of 6 children are presented in table 3.

Interpretation of the effectiveness of penicillin in the treatment of interstitial keratitis is indeed difficult. There appeared to be definite improvement immediately following treatment in 4 out of the 6 patients. However, 1 of the patients showing immediate improvement had a severe flare-up in the keratitis about four and one-half months following treatment. Of the remaining 2 patients, 1 who had a severe keratitis showed little or no improvement. The other has just been treated and shows little or no improvement immediately following therapy. No decrease in the titer of the blood has been noted in this group of patients except in patient number 16. It should be mentioned here that 1 patient, described below under the heading of miscellaneous, developed interstitial keratitis following two ten-day courses of penicillin.

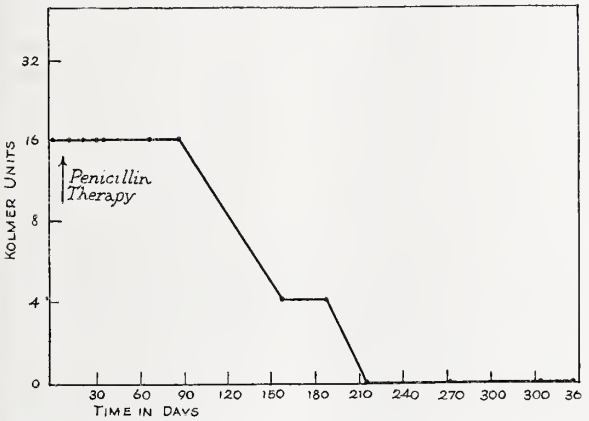

FIG. 1. Quantitative Kolmer serological titer followed 356 days in Case 4. The patient was a 2 months old male infant with early manifest congenital syphilis, who received 90,000 units of penicillin over a seven and one-half day period.

The first 4 patients received a total dosage of penicillin of 20,000 to 30,000 units per kilogram. The last 2 received approximately 40,000 units per kilogram. A total of 80 injections were given to each.

Late Congenital Syphilis, Neurosyphilis.—All 5 children in this group were suffering from juvenile paresis. Although follow-up has not been entirely adequate, we noted no immediate clinical improvement. No changes in the serological tests on blood or spinal fluid were found except in one instance. This patient was a 12 year old girl who had received routine treatment for several years; the spinal fluid Wassermann reaction changed from positive before penicillin therapy to negative immediately following treatment.

Late Congenital Syphilis, Miscellaneous.—One patient, a 13 year old girl with typical Hutchinson's teeth, was admitted with a hydrarthrosis of one knee. Serological tests of blood and spinal fluid were positive. About four days after the end of a ten day course of penicillin, the other knee became involved in a similar manner. A second course of penicillin for ten days was administered with only slight improvement in the knees. Much to our surprise about five days after the end of the second course of penicillin the patient developed a typical interstitial keratitis. Obviously penicillin was a failure in the treatment of this child. Whether penicillin precipitated the appearance of the hydrarthrosis of the second knee and the interstitial keratitis we are unable to say. This may have represented the natural course of the disease in this patient.

REACTIONS

The only definite reactions to penicillin that were observed were mild febrile reactions in two older children. Temperature elevations to 101 and 102 F. were observed within twenty-four hours after the onset of treatment. The temperature in both patients became normal within a few hours, and there were no further febrile or other reactions.

TABLE 3.—*Summary of Data Concerning Six Children with Interstitial Keratitis.*

Case No.	Age in years	Evaluation of Results of Penicillin Therapy	
		Clinical	Serological
5	9	Marked improvement at end of ten days. Ten months later patient reported by letter redness of eyes.	No change in titer at 317 days.
8	10	Marked improvement at end of treatment. Eyes completely clear at 51 days.	No change in titer at 51 days.
9	8	Little or no improvement after two courses of penicillin.	No change in titer at 73 days.
16	5	Marked improvement at end of treatment. Flare-up in keratitis at 135 days.	Definite decrease in titer at 184 days.
22	10	Marked improvement at end of treatment. Eyes clear except for minimal opacities of corneas at 83 days.	No change in titer at 83 days.
29	12	No improvement immediately at end of treatment.	No change in titer immediately after treatment.

DISCUSSION

In spite of the favorable results observed in the patients with early manifest syphilis, the overall effectiveness of penicillin in the treatment of congenital syphilis leaves much to be desired for the ultimate good results being sought in the treatment of this disease. It appears that the most logical method of attacking the problem of congenital syphilis is prevention by the diagnosis and treatment of syphilis in the pregnant woman. Penicillin has been used in the treatment of the mother before delivery; Lentz, Ingraham, Beerman, and Stokes have reported the prevention of congenital syphilis in this manner.

The series was small, but the results were good.

While others are directing their attention to the prevention of congenital syphilis, the pediatrician and general practitioner are still faced with the problem of treating congenital syphilis. If time should prove penicillin to be as effective or more effective than the old routine chemotherapy, it is obvious that this type of treatment will have many advantages over the old method.

A preliminary report on the treatment of infantile congenital syphilis by workers of university groups at New Orleans, Philadelphia, Baltimore, and Galveston indicates that penicillin is an effective agent. In 39 infants followed for four to twelve months there were clinical relapses in only 2, and the course was uneventful in the other 37. In 21 instances the serological test reversed to negative, in 13 the test was doubtful or positive but declining, and in 5 there were serological relapses. All patients studied received a total dosage ranging from 16,000 to 32,000 units per kilogram of body weight over a seven and one-half day period. These workers agree that the optimum method of the use of penicillin in congenital syphilis has not been defined; further reports will be made at later dates.

SUMMARY AND CONCLUSION

A preliminary report on the treatment of 29 infants and children with congenital syphilis by penicillin is given. All patients will be followed whenever possible for further evaluation of the treatment.

In infants with early congenital syphilis, the immediate clinical response has been very satisfactory and at times dramatic. A slow but definite decrease in the titer of the serological test has been noted in most of these patients.

In the group with late congenital syphilis, penicillin appears to be of value in some patients with interstitial keratitis, but at present we are unable to state its exact place. In late neurosyphilis no clinical improvement has been noted.

The use of penicillin should be continued in the treatment of congenital syphilis, provided adequate follow-up of the patient can be carried out. The optimum method of its use has not yet been defined.

REFERENCES

1. Lentz, J. W., Ingraham, N. R., Jr., Beerman, H., and Stokes J. H.: Penicillin in the Prevention and Treatment of Congenital Syphilis, J. A. M. A. 126:408-413 (Oct. 14) 1944.

2. Platou, R. V., and others: Penicillin in the Treatment of Infantile Congenital Syphilis, J. A. M. A. 127:582 (March 10) 1945.

TULAREMIA

REPORT OF SIX CASES OF TICK BORNE ORIGIN

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In the summer of 1943, six men entered a station hospital near Gainesville, Texas, because of symptoms of tularemia which had developed following the bite of a tick. The cases of these men are reported here because physicians who have practiced in the Gainesville, Texas, section for many years have stated that they were not aware that tick borne tularemia existed in the area.

Since the discovery of Bacillus tularensis by McCoy and Chapin in 1912,[4] more and more classes of vectors of the disease have been, and still are being, found. Francis,[3] as early as 1919 and 1920, recognized the deer fly as a vector of the disease in Utah. Since then, fleas, lice, and ticks have been proved to be carriers. Experimentally, mosquitoes have acted as vectors.[5] Of the ticks, Dermacentor andersoni and Dermacentor variabilis have been the most commonly encountered carriers of tularemia. Foshay[2] has reported 6 cases of tularemia following bites of ticks. Francis[3] reported 53 cases in which tularemia was transmitted by Dermacentor andersoni in Montana and neighboring states and 73 cases in which the vector was Dermacentor variabilis in southern states. Byfield, Breslow, Cross, and Hershey[1] recently reported 15 cases in which tularemia was transmitted by ticks to soldiers in Kentucky.

REPORT OF CASES

CASE 1.—A private, an infantryman, 21 years of age, who had been on duty in the field, was admitted to the hospital on April 7, 1943. Two days before his admission he had removed two ticks from the skin of the left axilla. On the same day he had become acutely ill with headache, chills, fever, and an unproductive cough. In the two days between onset of the disease and the patient's admission to the hospital, the lymph nodes of the left axilla had become enlarged and, in the same region, two cutaneous ulcers had appeared, each measuring approximately 0.5 cm. in diameter. The patient's temperature, at the time of his admission to the hospital, was 101.8 F. Otherwise, physical examination gave negative results. Laboratory studies revealed 18,950 leukocytes per cubic millimeter of blood, a sedimentation rate of 27 mm. per hour, and on April 22, as well as twice subsequently, positive serum agglutination for tularemia in a dilution of 1:320. Other laboratory determinations were negative. The patient remained febrile from the time of his admission until April 25; the temperature rose to levels of from 101 F. to 104 F. each afternoon. The ulcers in the left axilla slowly healed and the nodal enlargement subsided over a period of six weeks. The man returned to duty, completely recovered, on May 20, forty-three days after his admission to the hospital.

CASE 2.—A private, an infantryman, 19 years of age, was admitted to the hospital on June 11, 1943, because there had been a mass in the right femoral region for eight days. He also complained of having chills and fever each evening for several days. Examination revealed the sites of numerous insect bites on various parts of his body, which the patient said had been inflicted by ticks. On the middle portion of the right leg, anteriorly, was a punched out necrotic, cutaneous ulcer, about 1 cm. in diameter. A deep, oval, hard mass was found in the right groin. Laboratory studies revealed 10,800 to 12,600 leukocytes per cubic millimeter of blood and, fourteen days after the patient's admission to the hospital, positive serum agglutination for tularemia in a dilution of 1:320. His temperature was elevated daily until July 29, forty-eight days after his admission. The femoral mass was fluctuant on palpation on July 10 and was incised and drained. The incision healed in two weeks. The man was discharged to duty August 25, 1943, seventy-five days after his admission to the hospital.

CASE 3.—A private, an infantryman, 20 years of age, was admitted to the hospital on June 15, 1943, with a history of chills, fever, headache, dizziness, pain low in the back, and pain in the muscles of both legs, all of which had been present for one day. The patient was acutely ill. His temperature was 102.4 F. There was an infected ulcer at the site of an insect bite, said by the patient to have been inflicted by a tick, on the anterior surface of the left leg, and a lymph node in the left inguinal region was large and tender. Positive laboratory findings included a leukocyte count of 11,450 per cubic millimeter of blood and, on July 1, positive serum agglutination for tularemia in a dilution of 1:320. The patient's temperature was elevated for six weeks. An abscess in the left inguinal region was incised and drained. The ulcer healed about two weeks after the patient's admission to the hospital. The incision in the left inguinal region healed in six weeks. The man was discharged to duty after seventy-four days in the hospital.

CASE 4.—A private, an infantryman, 25 years of age, entered the hospital on July 31, 1943, because he had had a chill on the previous day, followed by headache, cough, generalized aching, malaise, and fever. He gave a history of having been bitten by a tick in the left axilla one week before his admission. Examination at the time of his admission disclosed only a temperature of 103 F. and evidence of insect bites on his body. Laboratory studies revealed a leukocyte count of 19,400 per cubic millimeter of blood, a sedimentation rate of 25 mm. per hour, and, on August 23, a positive serum agglutination for tularemia. The patient had fever for eighteen days, during which he lost 21 pounds (9.5 Kg.) of body weight. He was discharged to duty after sixty-eight days in the hospital.

CASE 5.—A staff sergeant in the infantry, 24 years of age, was admitted to the hospital on August 27, 1943, with the history of having had for two weeks a tender mass, the size of a large peanut, in the right groin. In one day the mass had increased to the size of a lemon and, at the same time, the man had had chills and fever. On examination, evidence of numerous insect bites, which the patient said had been inflicted by ticks, was found on both legs and there was a small, crusted lesion, about 3 mm. in diameter, on the dorsum of the right ankle. Fine, wheezing rales were heard throughout both pulmonary fields. The temperature was 102 F. The mass in the right groin was tender; the region was warm to the touch and the skin was reddened. Laboratory studies revealed a leukocyte count of 15,350 per cubic millimeter of blood and positive serum agglutination for tularemia in a dilution of 1:640. The right groin was incised on September 21 and a large quantity of green pus was drained from the region. Drainage continued for several weeks and then the incision healed. The patient was discharged to duty November 25, after ninety days of hospitalization.

CASE 6.—A private first class, an infantryman, 21 years of age, was admitted to the hospital on August 10, 1943, because of fever, chills, stiffness of the neck, headache, and pain in the left lumbar region, all for four days. He recalled having removed a tick from the lumbar region several days before his admission to the hospital. The patient was acutely ill, and his temperature was 104 F. In the left lumbar region was an ulcer, 0.5 cm. in diameter, and a tender mass, measuring 2 by 2 cm., was found adjacent to the left lower ribs, posteriorly. Leukocytes numbered 11,750 per cubic millimeter of blood and, on September 11, serum agglutination tests for tularemia were positive in a dilution of 1:640. The mass became fluctuant and was drained on September 8, 1943. The patient completely recovered and was discharged from the hospital ninety-four days after his admission.

SUMMARY AND COMMENT

Six infantrymen were admitted to a hospital near Gainesville, Texas, in the period between April and August, inclusive, in 1943. Five had the ulceroglandular type of tularemia and one the typhoidal type (case 4). None gave a history of having been in contact with rabbits or other rodents. All gave histories of having been bitten by ticks. Ticks were unusually numerous in the district and everyone who trained in the area had to remove ticks from his body frequently during the months April to September, inclusive. The predominant symptoms were the ulcer at the site of the tick bite and enlarged regional lymph nodes. In all cases there was a septic type of fever and general signs of toxemia. In only 1 case were there symptoms and signs clearly referable to the thorax. In all cases, agglutination tests made with blood serum were positive for tularemia in from fifteen to thirty-six days after onset of symptoms. Such tests were not positive during the first two weeks of the disease. In all cases agglutination tests for typhoid, paratyphoid, undulant, and typhus fever were negative. The course of the disease was prolonged; the average stay in the hospital was seventy-seven days.

All patients received sulfonamide drugs orally, without notable effect on the course of the illness. In 4 of the 6 cases, incision and drainage of abscessed lymph nodes was necessary. Treatment other than symptomatic did not seem to alter the course of the disease.

REFERENCES

1. Byfield, G. V., Breslow, L., Cross, R. R., Jr., and Hershey, N. J.: Tick Borne Tularemia; Report of Fifteen Cases, J. A. M. A. 127:191-196 (Jan. 27) 1945.

2. Foshay, L.: Tularemia: A Summary of Certain Aspects of the Disease Including Methods for Early Diagnosis and the Results of Serum Treatment in 600 Patients, Medicine 19:1-83 (Feb.) 1940.

3. Francis, E.: Tularemia, in Cecil, R. L.: A Textbook of Medicine, ed. 5, Philadelphia, W. B. Saunders Company, 1940, pp. 371-375.

4. McCoy, G. W., and Chapin, C. W.: Bacterium Tularense the Cause of a Plague-like Disease of Rodents, Puh. Health Bull. 53:21 (Jan.) 1912; cited by Francis, E.: Tularemia, in Cecil, R. L.: A Texthook of Medicine, ed. 5, Philadelphia, W. B. Saunders Company, 1940, pp. 371-375.
5. Philip, C. B., Davis, G. E., and Parker, R. R.: Experimental Transmission of Tularemia by Mosquitoes, Puh. Health Rep. 47:2077-2088 (Oct. 21) 1932.

INJURY TO THE COLON FROM AIR HOSE INFLATION

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I am sure that all who grew up in small towns recall one or more "goosey" Negro boys who unfailingly reacted picturesquely to appropriate stimuli to the perennial delight of appreciative audiences. In such a situation no harm was done and in the immortal words from "The Mikado" a "source of innocent merriment" was provided. But this is not always true. The hazards of compressed air hoses are apparently little understood by many men who handle them and this lack of knowledge together with the impulse to "goose" a fellow workman has led to many tragedies.

Swenson and Harkins in a review of the literature of injuries to the colon from compressed air published in the *American Journal of Surgery* in January, 1944, said that up to that date 65 cases of complete rupture of all the coats of the colon, and 10 cases of incomplete rupture had been reported. Compressed air was introduced into industry around 1900 and the first case report of injury to the bowel from it was made by Stone in England in 1904. The first complete review of this type of injury was published by Andrews in 1911 with a case report of operation and recovery and a collection of 15 unpublished cases. Since then the most thorough discussion I have found was by Ide. Neece, Block and Wiessman, Brown and Dwinelle, Patterson, Burt and others have written about this condition and a very large proportion of all these injuries were the result of horseplay, though some were truly accidental.

Most air hoses used in industry apparently carry a pressure of from 75 to 125 pounds per square inch. Many of the injuries occurred in railway employees and most of the remainder in factories. Ide could find only a hearsay account of 1 case in a filling station but I recall reading of one years ago but was unable to locate the original report. Probably the construction of the nozzle used in filling stations mainly for inflating tires accounts for its rarity there. Ide points out that compressed air is piped to various places in industrial plants and is used extensively in industry for transmitting power to drills, riveters, and other machinery, for cleaning debris from inaccessible places, paint spraying, sand blasting, and the like. Also most of the men who have written of this injury tell of the habit workmen have of dusting off each other's clothing with compressed air and several of the really accidental cases reported have happened when this was done by a fellow workman at the request of the victim, but the largest number have been the result of a practical joke and with very few exceptions the victims have been fully clothed. In many instances the nozzle of the hose has been held several inches from the anus. It is clear that clothing is no barrier and the gluteal folds seem to channel the stream of air into the rectum.

Burt did some experiments on closed intestinal segments from cadavers and found that the average pressure required to rupture the two outer coats of the intestinal canal was 3.49 pounds per square inch and the pressure required to perforate was 4.07 pounds. In children below 12 years of age the pressure required was slightly higher. The rectum withstood the greatest average pressure and the sigmoid, ileum, esophagus, jejunum, transverse colon, cecum, and stomach are in order in the pressure required to rupture the specimens.

In spite of the experimental strength of the sigmoid, Brown and Dwinelle published a chart of 38 ruptures of the colon; in 32 cases of these, 2 were in the ascending colon, 4 in the transverse, 2 in the descending, and the remainder in the sigmoid and upper rectum. The obvious explanation of the frequency of sigmoid injuries is the impact of the column of air on the sigmoid flexure. The tears are most frequent along the longitudinal muscle bands of the colon, and the commonest injury is several tears, usually longitudinal, through the serosa and all the muscle layers of the bowel, with the mucosa bulging through these like an inner tube about to blow out and with one or more complete ruptures. There have been a few instances of tearing of the mesosigmoid with destruction of the blood supply of the bowel, and two reports of retroperitoneal emphysema probably due to minute rupture on the posterior surface of the colon. Brown and Dwinelle report 1 case with emphysema behind the hepatic flexure, marked distention of the small bowel and air in the gallbladder. The most severe cases have had huge distention, universal tympany, and in a few instances generalized subcutaneous emphysema. Intraperitoneal bleeding is usually moderate and fecal spillage is variable. There is only rarely bleeding from the rectum. Many of the most badly injured patients have died without operation, but Ide quotes an unpublished case which shows what can occasional-

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ly be withstood.

The patient, an oiler in a car shop, was inflated with air from a hose with a ⅝ inch nozzle carrying 90 pounds pressure by a fellow workman in a playful mood. He was wearing overalls, trousers, and underwear with no holes in any of them. He felt a sudden severe pain and said he could feel air filling his abdomen. His friends walked him about, hoping to remove some gas, and then put him in an automobile and gave him a ride as their first treatment had not been a great success. He was seen two hours after the injury. The abdomen was unusually hard, much harder than in the average case of peritonitis. Because of a failure to appreciate the possibilities, the patient was given a turpentine enema. At operation six hours after the injury when the peritoneum was opened, gas escaped under high pressure with a noise almost as loud as the report of a blowout of a small automobile tire. The patient was given appropriate treatment and recovered.

In severely distended patients prompt peritoneal aspiration with a large needle has given marked temporary relief in several instances. There have been some 10 cases reported in which the patients were as fortunate as the one I am describing with one or several tears through the muscular coats and the submucosa everywhere intact. In the cases of complete rupture x-ray studies of course should demonstrate air above the liver. The mortality in the earlier cases was quoted by Andrews as 81 per cent. A later report by Block and Weissman gives the overall mortality as 70 per cent. It is astonishing how many patients in the earlier cases were not operated upon. In the 10 incomplete ruptures reported the mortality was 10 per cent. The mortality of all the patients operated upon included in their report was 47 per cent.

If the surgeon knows of the possibility of this type of injury and recognizes that it may be present, the plan of handling is clear. If distention is acute with widespread tympany, preliminary paracentesis of the peritoneum should be done and then laparotomy as soon as possible. A liberal lower midline or, probably better, left rectus incision should be made with removal of the blood and feces by suction and sponging. A thorough examination of the colon should be made and the rent or rents repaired by two layers of sutures if this is possible. If damage is too extensive to repair, the bowel should be brought out as a temporary colostomy, or if the security of the repair seems doubtful, a temporary colostomy should be established above the injured bowel. A sulfonamide in the peritoneal cavity and drainage if the rupture has been complete are in order. Many of the patients who have been repaired have had temporary fecal fistulae and recovered. Some surgeons have passed a rectal tube at operation and threaded it up past the injured area. Certainly gastric suction for several days seems indicated. Of course, no enema should be given postoperatively. The usual supportive opiates, fluids, transfusions, and sodium salts of the sulfonamides intravenously should be used as needed. With immediate recognition of this rare injury and modern surgical handling the future mortality should certainly be lower.

CASE REPORT

Mr. A. H. P., age 42, a laborer, was admitted to St. Joseph's Hospital July 29, 1943, at 1 p. m. by ambulance from an airplane plant. A short time before a fellow workman had stuck an air hose carrying from 85 to 100 pounds pressure against his rectum as a practical joke. He had on light work clothes. He felt himself being blown up and had moderate pain but was not greatly distended. He was able to walk a considerable distance and expelled some air from his anus but soon had more severe abdominal pain and vomited once.

When I saw him he was apprehensive and had some diffuse lower abdominal pain but only very moderate distention. There was some muscle spasm in both lower quadrants and the whole lower abdomen was tender. There was no bleeding from the rectum. Liver dullness was not obliterated. His blood pressure was 150/90 and his pulse rate 66, and he was not cyanotic. Within an hour he was given 120 mg. of procain intraspinally in the third interspace and then, because of extreme apprehensiveness, a little gas, and the abdomen was opened through a lower midline incision. From 4 to 6 ounces of blood was present in the pelvis. When this was sucked out the patient was placed in Trendelenberg position and the small intestines, which were moderately distended, were packed away. Three longitudinal tears were seen—one about 2.5 inches long at the rectosigmoid junction and two shorter ones, perhaps an inch long, just below on the anterior upper rectal wall. The tears involved the serosa and all the muscular coats, but the submucosa, which bulged through all of them in a rather startling manner, seemed everywhere intact.

The defects were all closed with two layers of continuous sutures of fine chromic catgut, 5 Gm. of sulfanilamide powder was placed in the pelvis, and the abdomen was closed in layers with catgut without drainage. A small quantity of sulfanilamide powder was sprinkled in the wound. Gastric suction was instituted with the customary intravenous fluid therapy. The patient was given morphine liberally and several times a day a large urethral catheter was inserted 3 inches into the rectum and left for an hour. Mineral oil by mouth was begun on the fourth day and a strict order against any enemas was written. He was never really ill. His highest temperature was 100.4 F. on the second postoperative day. He had a small hematoma in the wound which delayed healing. Because of traumatic neurosis and an impending law suit, he had not returned to work when I last saw him three months after the injury but seemed physically sound.

REFERENCES

1. Block, F. B., and Weissman, M. I.: Pneumatic Rupture of the Sigmoid, J. A. M. A. 86:1597-1598 (May 22) 1926.
2. Brown, R. K., and Dwinelle, J. H.: Rupture of Colon by Compressed Air; Report of Three Cases, Ann. Surg. 115:13-20 (Jan.) 1942.
3. Burt, C. V.: Pneumatic Rupture of the Intestinal Canal with Experimental Data Showing the Mechanism of Perforation and the Pressure Required, Arch. Surg. 22:875-902 (June) 1931.
4. Ide, A. W.: Pneumatic Rupture of the Bowel, Minnesota Med. 19:265-268 (April) 1936.
5. Neece, C. C.: Rupture of the Intestinal Canal With Compressed Air, Trans. Am. Proctologic Soc., pp. 81-82, 1937.
6. Patterson, D. C.: Compressed Air Rupture of Intestines, New England J. Med. 202:118-121 (Jan. 16) 1930.
7. Swenson, S. A., Jr., and Harkins, H.: Rupture of the Rectosigmoid by Compressed Air; Case Report, Am. J. Surg. 63:141-143 (Jan.) 1944.

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POSTPARTUM STERILIZATION

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The function of reproduction is often regarded as a supreme duty and a justifiable reason for our existence, for by the exercise of this function the perpetuation of the race is assured. This function is brought into exercise as the result of one of man's primal instincts; namely, the sex instinct. With the evolution of the race and the development of men into an interrelated social existence many controls and checks upon reproduction have been studied. These controls have as their prime object a limitation of reproduction so that future generations may be assured better opportunities and a fairer share in the material things of life. In spite of objections and vigorous opposition from religious organizations, as well as those who fear a reduction of future manpower, there exists in modern life to quite a degree some definite limitation of the reproductive faculty.

In spite of such limitations, however, results have not been in all cases satisfactory nor have the various methods of limitation of reproduction been uniformly successful. The practice of contraception by many various methods has not proved entirely safe or certain and no method has been discovered which has been 100 per cent successful. Observance of the so-called safe period has also in many instances been unreliable if not uncontrollable. Again cooperation of both partners in the efforts of contraception is not always secure. There is frankly carelessness and negligence in the observance of this method of contraception and most doctors agree that there is practically no limitation of reproduction in that stratum of society which needs it most; namely, the underprivileged, the ill-fed, ill-housed, and ill-clothed. Here large families, larger than can be supported satisfactorily by the head of the house, are the rule, and Church and State are called upon to take over the burden and help support the members of such families, as well as to provide satisfactory hygienic surroundings and proper education. For the above reasons contraception alone will not always meet the problem of limitation of reproduction; consequently other methods must be sought.

Speaking frankly and looking at the matter in a material sense alone, for absolute control of reproduction there exist but two avenues. One of these is legalization of abortion. Proponents of such a method claim that reproduction could be controlled thereby and the toll from infection with its train of morbidity, later sterilization, or even death would be prevented. I make no brief for such a course and cite only the experience of the Russian Soviet government as an instance of such an attempt at control. The Russian government legalized abortions and made divorces as easy as the spoken word but later abrogated such laws, not from religious pressure but from the very practical reason that a greater degree of morbidity and subsequent sterilization occurred in a surprisingly large number of women. Consequently, since we have had a practical test of such a method, even if we did not have ethical or religious objections, we can see that this method fails.

The other alternative is that of sterilization of one of the partners. Such a method is certain and definite and there are various means for its consummation. The objection raised is that most methods of sterilization are a permanent thing and any change of sentiment or desire on the part of the individual concerned cannot alter what has already been done. A woman who has been sterilized and who may later remarry would not be able to bear another child by her second marriage. Such facts should always be considered carefully and explained to any couple who contemplate sterilization of one partner. It must be remembered, however, that reconstruction of the lumen of tube or vas by subsequent operation is not beyond the realm of probability.

Before going into consideration of the methods of sterilization we might consider indications for such.

1. The most common reason for sterilization is the existence of a wasting disease or any disease in the woman which associated with a pregnancy might undermine her health and shorten her life. There are many such diseases, including tuberculosis, nephritis, cardiovascular renal disease, diabetes, ulcer of the stomach, and any form of carcinoma. Certainly such conditions would preclude a pregnancy.

2. Multiparity. Certainly the medical profession cannot act as a judge and say how many members a family should have, but any physician from year to year in observing the families he serves can easily see how frequent and closely spaced pregnancies can shorten the life of the mother or render her unfit for her duties as a keeper of the home and the guide for the growing children. Eastman contends that young mothers may space their babies one year apart and fare better than mothers bearing children in the thirties, but recently Yerushalmy has shown

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definitely that more stillbirths occur in women in the twenties than those in the thirties. Consequently, we cannot agree with the advocacy of closely spaced pregnancies. To those who would raise the question of ethical or religious scruples I would say that pregnancies of this sort are entered into with dread and foreboding and rebellion and that the partners in such a family would welcome more of planned prevention and less of planned parenthood. Where there is one child planned for, there are a score who are not planned for, unwelcomed, and looked upon as a burden.

3. The third reason for limitation of reproduction is to me entirely justifiable but does not carry the weight of the two former reasons. This is strictly a eugenic reason. If we are to rear a generation of healthy individuals and give them opportunity for education, health, and steady employment in the future, we must limit reproduction to some extent and where reproduction gets out of the hand of contraception, sterilization would be indicated.

Now as to the method to secure sterilization; first, in the male. Sterilization in the male is a simple process, a minor operation which can be performed under local anesthetic, and consists simply in taking a small section out of the vas deferens and ligating the severed ends. The advantages of such an operation are that it is simple, safe, and disables the patient for a period of not more than a week. The only difficulty about such an operation is that for some reason the male of the species objects to be rendered sterile. It has always been a puzzle to me why the female makes little fuss about surrendering an ovary and tube while the male would surrender a like counterpart only when convinced it is tuberculous or cancerous. The only explanation that I can give, which is far from satisfactory, is that visual impressions are very vivid. A woman's sexual apparatus may be mutilated, but the damage is out of sight and she is not reminded daily of her loss; whereas, the male would have it presented to view from day to day. Since vasectomy is not easily secured for the above reasons the female must bear the brunt of the burden in limitation of reproduction just as she does in reproduction itself.

There are various methods of sterilization in the female, all of which have certain objections and limitations.

First, there is oophorectomy. This method is definite and certain provided there are no ovarian rests elsewhere in the pelvis. It is a very radical method, especially in women many years before the time of the menopause. Consequently it can be ruled out as a method of choice except in rare instances.

For the same reason sterilization by the use of roentgen ray upon the ovary is not to be considered in women in the early childbearing age.

Hysterectomy is another method of sterilization, but this is quite radical and there are a few instances reported where the ovum has been fertilized and implanted on the cervical stump. Such cases are rare indeed and are mentioned more for interest than anything else.

Another method of sterilization is cauterization of the uterine cornu from within. This leads to fibrosis and closure of the uterine end of the tube. Proponents of such a method urge that it is usually temporary and does not preclude the possibility of a later pregnancy if such is desired; however, it is not always reliable as a slough may occur and a fistula occur through which the ovum might enter the uterus.

Then there is tubal operation. Operations upon the tubes block the passage of the ovum from the ovary to the uterine cavity and prevent pregnancy. Such a method is attractive because no damage is done to the ovary and normal sex life is not prevented. One of the most popular methods of tubal operation was devised by Madelener, a very simple operation in which the tube was macerated in two places by forceps and tied with linen. This sometimes results in failure because the sutures may cut through the lumen and leave a portion of the lumen unobstructed. Dr. E. D. Plass, of the University of Iowa, reports 1 per cent failure with this technic. A second technic is to sever the tube and ligate each end with plain catgut without maceration. A third method is to sever the tube and bury the proximal end, usually in a fold of the mesosalpinx. This is very simple and convenient but sometimes difficult on account of marked varices in the mesosalpinx. Again the proximal end of the tube may be buried in the uterine wall. One operator makes a stab wound in the uterine muscle, plunges the proximal end of the tube therein, and takes a few sutures in the uterine wall. A fourth method is to bury the proximal end of the tube in an incision in the round ligament. This method was initiated by Dr. Willard Cooke of Galveston and seems to have no virtue except that there is no danger of interfering with circulation in the mesosalpinx.

Lately I have adopted the practice of sterilizing the patient when requested and indicated by ligating the tubes immediately after delivery. I have been surprised and

delighted with the results. It has the following advantages: First, it appeals to the couple involved. In the past I had many times been asked to tie off the tubes when doing a delivery but explained that this could not be done easily per vaginum, especially at the time of delivery. After Adair and other Chicago workers published their results on postpartum sterilization I began to explain to my patients that this result could be obtained by an operation immediately after delivery. It is almost universally accepted because at such a time the prospect of repeated deliveries is before the couple and they are more likely to plan to do something about it than to do anything later. The advantage of having it done with the same anesthetic of the delivery is also important. Another advantage is the easy approach to the tube as the uterus is an abdominal organ at the time and the tube can be reached through a very short incision immediately below the umbilicus; whereas, if the operation is done in the non-pregnant state, the tube is a pelvic organ and the incision and manipulation must consequently be much more extensive. Another very happy reason is a short convalescence in such an operation. The patient is confined to bed no longer than she would be with her puerperium and she does not feel that she has had two operations.

To date I have never seen any untoward results in these cases. Involution proceeds normally and postpartum examination at the six-weeks check up shows everything in good condition. The only disadvantages that I see are first, there may be marked congestion of the tubes and of the vessels of the mesosalpinx and very extensive varices which make burial of the ends of the tubes sometimes a very delicate procedure, and second, there may be some postpartum flatulence just as there is after cesarean section, but usually except for some abdominal soreness, which is inevitable, there is no complaint made by the patient.

SUMMARY

1. Some control of limitation of reproduction seems inevitable.

2. Various methods of contraception are at best only relatively successful and certainly often unreliable because of poor cooperation of those involved.

3. There are definite indications for sterilization.

4. Where pregnancy occurs and other pregnancies are not indicated, postpartum sterilization by tubal ligation offers the easiest, most practical, and safest method of procedure.

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A SURVEY OF TUBERCULOSIS OBSERVED AT FREEMAN CLINIC FROM 1934 TO 1944 AND RELATED STATISTICS

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DALLAS, TEXAS

The purpose of this paper is to determine, from all available local data, whether Dallas is one of the areas where a tuberculosis survey would be worth while. The United States Public Health Service, through an act of Congress, is in the early process of inaugurating a nationwide tuberculosis control program. The original bill calls for the expenditure of ten million dollars. The first funds for the use of the States will probably be available in January, 1945. The State Board of Health plans to purchase a number of photo-fluorographic units with the general plan in mind of using these in areas of the state where the problem is acute. Coordinated with the case-finding project will be the extensive education and follow-up facilities. The plan of necessity will have to be worked out with the medical profession and the limitations devised by them agreed upon.

During the past ten years, there have been 18,018 admissions to the Freeman Clinic. Each patient had a tuberculin test on admission. All reactors were referred to the tuberculosis department of the clinic for study. A dose of 0.1 mg. of old tuberculin was used for the initial test. Readings were made at the end of forty-eight hours (preferably at 72 or 96 hours). A reaction was recorded if the skin showed an area of redness at least 5 mm. in diameter, with some *induration*. In suspicious cases where the reaction was not definite, a 1/100 dilution and occasionally a 1/10 dilution were used. The tests were administered by a technician and interpreted by a physician. Old tuberculin made by the large biological companies was used until the last few months. We have recently obtained some old tuberculin from the Saranac Laboratory in New York. This is of standard potency. Dilutions are made with a buffered phenolized solution which remains stable, even in a 1/1000 dilution, over a long period of time.

Roentgenograms were made of the chest of every reactor. In children under 5 years of age, roentenograms were repeated on the average of every six months. For those from 5 to 10 years of age, films were taken every two or three years, and after 11 years, they were checked at least once a year.

From the Department of Pediatrics, Southwestern Medical Foundation, Dallas, Texas.
Prepared for reading before the Section on Pediatrics, Annual Session, State Medical Association of Texas, Galveston, May 8-10, 1945, cancelled because of war conditions.

SPECIFICITY OF THE TUBERCULIN TEST

The intradermal tuberculin test is the most specific test we have. A characteristic reaction means the patient has definitely been infected with tubercle bacilli. A failure to react to the test, if properly made and interpreted, and, if necessary, carried down through a 1/10 dilution rules out tuberculosis in children, except in very rare cases. During the past ten years, I have not seen a proven case of tuberculosis in which the 1/10 dilution did not produce a reaction.

Table 1 shows the number of admissions to the clinic during the past ten years and the percentage of reactors. Children are admitted to the clinic up to puberty, the average being 6 to 8 years of age. The Mexican admissions showed about twice as many reactors as the white. The reactors in Negroes is surprisingly low as compared to the white. One explanation is that the Negro dies more rapidly than the white race and does not have as much opportunity to disseminate the infection. Another possible explanation is that not enough emphasis on induration was placed by the interpreter. Obviously, in Negroes, one must depend on induration rather than redness in interpreting the test.

The factors on which a diagnosis of active tuberculosis in children is based are, as follows:

1. Tuberculin reaction.
2. Positive sputum or stomach washing.
3. X-ray shadow.
4. Persistent elevation of temperature (temperature recorded four times daily [rectal] for two weeks).
5. Loss of weight.
6. Cough.
7. Sedimentation rate (started only recently).

The factors on which a diagnosis of an inactive reactor is based are:

1. Essentially negative roentgenogram.
2. Negative sputum.
3. Normal temperature.
4. Good progress clinically.
5. Sedimentation rate (started only recently).

A sputum examination was made on all patients with a productive cough. Stomach washings were made on infants who were reactors. Either guinea pig inoculation or a culture was made. It has been suggested by some investigators that a more rapid method would be to inoculate noninfected guinea pigs and follow up with a tuberculin test in three or four weeks. The animal should react at the end of this time if the injected material contained tubercle bacilli.

TABLE I
PERCENT OF PATIENTS WHO WERE REACTORS TO MANTOUX TEST AT FREEMAN CLINIC, 1934 - 1944

	Number	Reactors	Percent Reactors
Total Admissions	18,018	2,225	12.35
White	11,318	1,303	11.55
Mexican	1,049	228	21.73
Negro	5,651	689	12.19
Total Admissions 1940	2,924	333	11.38%
Total Admissions 1941	3,102	321	10.34
Total Admissions 1942	2,167	287	13.24
Total Admissions 1943	1,943	273	14.05
High School Students Tested Since 1939(City)	3,681	820	22%

TABLE II
CLASSIFICATION OF REACTORS

1. Minimal Primary Tuberculosis	544
2. Tracheo Bronchial Lymphadenitis	771
3. Miliary Tuberculosis	7
4. Tuberculosis of Vertebra	11
5. Tuberculous Meningitis	7
6. Tuberculosis of Lungs, far advanced	6
7. Tuberculosis of Lungs, moderately advanced	3
8. Tuberculous pleuritis	3
9. Tuberculous pericarditis	1
10. Tuberculous peritonitis	3
11. Lung Abscess	3
12. Tuberculosis of Cervical Lymph Nodes	2
13. Tuberculosis of Thyroid Gland	1
14. Tuberculosis of Hip Joint	1
15. Psoas abscess	1

TABLE III
ACTIVE CASES

	White	Mexican	Negro
Active on admission	14	10	2
Becoming active during 10 years	5	2	13
Becoming inactive during 10 years	9	7	3
CONTACTS			
Parents	180	26	52
Grandparents	37	4	1
Others not known	130	47	118
ISOLATION			
Home	2	5	9
Sanitorium	12	3	1
Deaths	3	1	1

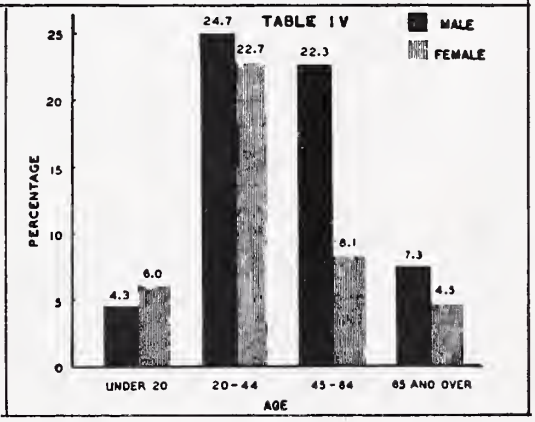


Table 2 shows the classification of the various reactors. The minimal primary tuberculosis group showed no significant change in the roentgenogram. The tracheobronchial lymphadenitis group showed some involvement of the hilar regions and usually a minimal involvement in the parenchyma. An occasional Ghon's tubercle was present. Practically all of these two groups were, as far as we could determine, inactive and were allowed to go to school, nursery, and so forth. It is interesting to note that only three cases were diagnosed as tuberculous pleuritis. I can remember seeing only 1 case in the last ten years with an effusion severe enough to require aspiration. Abscess of the lung is rare in children—only 3 of our cases were so diagnosed. These probably were of the reinfection type. Tuberculosis of the cervical lymph nodes does not occur now as frequently as in the past—only 2 cases were thus diagnosed.

TABLE V

MORTALITY FROM TUBERCULOSIS IN TEXAS AS COMPARED TO UNITED STATES AS A WHOLE

	Total Number of Deaths (Texas)	Texas Rate	U.S. Rate	Deaths from TB Under Five Years (Texas)
1934	4,020	66.8	56.7	121
1935	4,202	69.1	55.1	118
1936	4,374	71.1	55.9	110
1937	4,289	69.0	53.8	131
1938	4,129	65.8	49.1	121
1939	3,911	61.6	47.1	118
1940	3,797	59.1	45.9	114
1941	3,684	56.0	44.4	121
1942	3,568	53.2		129
1943	3,287	47.2		96
1944				

TABLE VI

TEXAS

POPULATION, RACE, DEATHS, RATES BY COUNTIES

	County	Total Population	Anglo-American Population	Death	Rate	Latin-American Population	Death	Rate	Negro	Death	Rate
1939	State	6,355,813	4,694,734	1,488	31.6	743,630	1,613	216.9	917,449	816	88.9
1940	State	6,414,824	4,739,898	1,426	30.0	750,535	1,539	205.0	924,391	758	81.9
1941	State	6,473,835	4,785,064	1,386	28.9	757,438	1,516	200.0	931,333	723	77.6
1939	Bexar	333,612	199,825	101	50	112,760	349	309	21,027	29	138
1940	Bexar	338,176	204,671	91	44	114,303	346	303	21,202	21	99
1941	Bexar	342,740	305,517	127	62	115,846	327	282	21,377	28	131
1939	Dallas	391,287	321,819	128	40	9,234	34	368	60,234	74	123
1940	Dallas	398,564	327,553	109	31	9,406	30	319	61,604	79	128
1941	Dallas	405,841	333,286	116	35	9,577	32	334	62,978	68	108
1939	El Paso	131,067	51,541	82	159	77,067	108	140	2,459	3	122
1940	El Paso	131,067	51,487	73	142	77,067	92	119	2,513	6	239
1941	El Paso	131,067	51,433	47	91	77,067	93	120	2,567	8	312
1939	Harris	511,998	384,027	140	36	27,340	62	227	100,631	133	132
1940	Harris	528,961	396,970	119	30	28,246	64	227	103,745	119	115
1941	Harris	545,924	409,913	132	32	29,152	70	240	106,859	121	113
1939	Tarrant	222,724	189,516	60	32	5,122	8	156	28,086	30	107
1940	Tarrant	225,521	191,868	68	35	5,186	8	154	28,467	34	119
1941	Tarrant	228,318	194,219	67	34	5,251	13	248	28,848	13	45
1939	Travis	107,725	74,391	27	36	14,155	44	311	19,179	12	63
1940	Travis	111,053	76,910	34	44	14,592	32	219	19,551	21	107
1941	Travis	114,381	79,429	34	43	15,029	40	266	19,923	13	65

Table 3 emphasizes the small percentage of active cases observed. Unfortunately, a thorough history of contacts was not obtained on all the reactors. In the younger group the parents or grandparents were found to be the infectors in a large percentage of the cases. In the older group the contacts were not known in many of the reactors. The death rate is inaccurate due to the fact we were unable to follow up our cases thoroughly.

A list of our reactors is routinely given to the Dallas Tuberculosis Association. An examination of all close contacts is supposed to be made. I believe that one of the most important results of tuberculin testing in children is the clue it gives us in detecting active tuberculosis in the adult contacts. Oftentimes, these adult contacts are in the early stages of the disease, most of them not suspecting they have the disease. It is important to isolate these active adults from the children. Children tolerate the first infection very well, but too often succumb to repeated overwhelming reinfection.

OUR PRESENT NEEDS

Our present needs for the control of tuberculosis are:

1. A state law requiring all active cases of tuberculosis to be isolated. (I understand legislation is planned which will help enforce isolation of active cases).

2. More hospital beds for active cases. (It is planned to have regional hospitals scattered over the state for the care of active tuberculosis. Dallas would be an ideal site for such an institution).

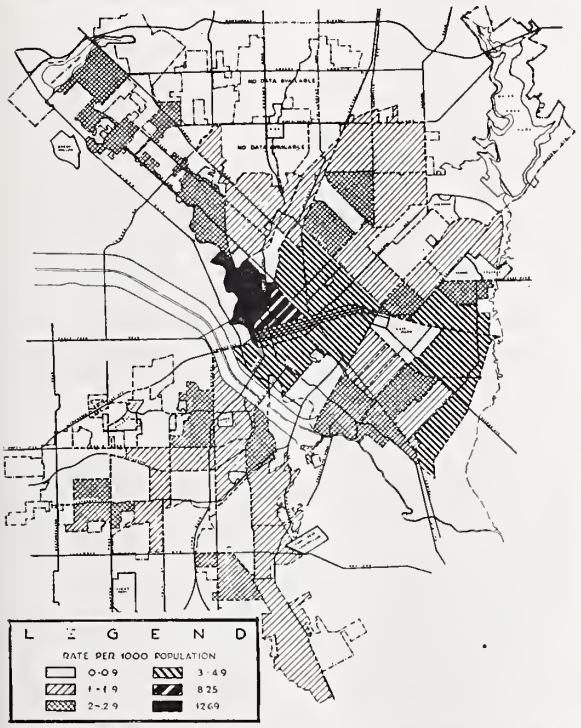
3. A case-finding program.

The first two needs would of necessity have to be provided for before much could be accomplished with a case-finding program. The question arises as to what is the best method of case finding. There is a difference of opinion among various investigators.

Myers of Minneapolis and Stewart of New Orleans believe the most practical and thorough way is to do mass tuberculin testing of the general population. Since a tuberculin test, if properly done and interpreted is one of the most reliable tests we have, and since there is only a 1 per cent increase or less per year in reactors in some parts of the United States, this method would eliminate the making of roentgenograms on a large percentage of the people. (Certain areas have a much higher percentage of reactors than this). For instance, roughly 30 per cent of 30 year-old persons would be reactors. Therefore, only 30 per cent of this age group would need roentgen study to determine the active cases. A tuberculin test, carried down through 1/1000 and 1/100 dilutions, which does not produce a reaction, rules out tuberculosis in children and active tuberculosis in adults in practically 90 to 100 per cent of the cases. Tuberculin reactors should be subjected to x-ray study annually after puberty. This

often enables us to detect the location of lesions at a stage when they can be treated successfully. This method also makes people more tuberculosis-conscious. At the present time a good percentage of patients do not consult physicians until they have symptoms of the disease beyond the stage at which medical treatment can be of much help. This accounts in part for the high death rate in various sanatoriums.

Other methods suggested include examinations of all contacts of active cases of tuberculosis. This method detects a number of cases in the immediate environment but fails to find cases from other contacts. All high school students should have the tuberculin test. The non-reactors should be retested annually. The reactors should have x-ray inspection of the chest annually. Table 4 demonstrates the importance of close follow-up of this age group. The death rate increases sharply after puberty.



Map of Dallas, showing tuberculosis death rates per 100,000 population from 1933 to 1937.

We have plotted on the map of Dallas the various areas from which our reactors come. Our map corresponds very closely to the accompanying map showing tuberculosis deaths in Dallas for the years 1933-1937. A thorough survey of the Mexican and Negro districts shown on the map would not only help eliminate tuberculosis in those areas but would also benefit the city as a whole, since most of our domestic help comes from these areas.

All maids, food handlers, school teachers, and any other group coming in close contact with the public should have annual x-ray inspections of the chest. Tuberculin testing of a large number of school children in Beaumont showed that children coming from homes in which maids were employed had a much higher percentage of tuberculin reactors than those without maids.

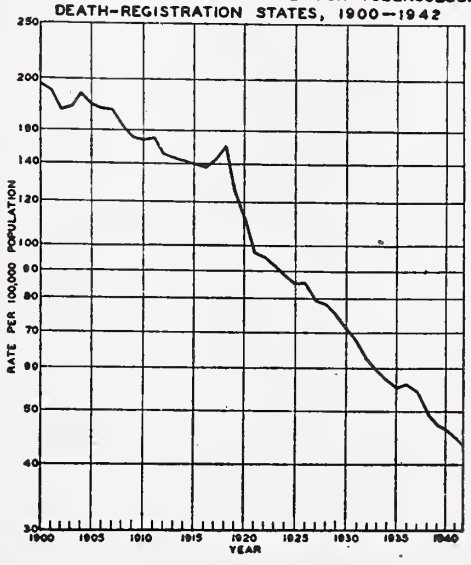
Table 5 shows the death rate from tuberculosis in Texas compared with the general mortality in the United States.

Table 6 shows the death rates in the various large cities of the state. The death rate in the Mexican race is ten times as high, and the Negro rate twice as high as the white.

In spite of the justifiable gratification with which we may regard the great decrease in the total mortality from the disease in the last forty years, it is nevertheless very important not to lose sight of the disturbing fact that tuberculosis is still by far the most common cause of death in that valuable age period between 15 and 45. In the United States in 1940, tuberculosis was responsible for 18.6 per cent of all deaths in persons between 15 and 24 years of age, and for 14.3 per cent of all deaths among individuals between 25 and 44 years of age.

TABLE VII

TREND OF DEATH RATES FOR TUBERCULOSIS: DEATH-REGISTRATION STATES, 1900—1942



The disease that still kills more than twice as many persons as any other single cause of death during this particularly productive and enjoyable period of the life-span can hardly be jubilantly regarded as "nearly conquered."

The author wishes to express his sincere appreciation of the work done by Miss Mary Abbie Jack and Miss Mary Kirkland in compiling statistics and analyzing the 18,000 admissions to the clinic.

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THE DIAGNOSIS AND TREATMENT OF OCULAR NEUROSES

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The early recognition of the functional patient is an important consideration, for failure in this recognition has resulted in disagreeable therapeutic adventures or erroneously interpreted improvements. Unfortunately, the habitus is not specific, for neuroses occur with equally severe symptoms in both the physically weak and physically strong. However, certain rather definite attitudes on the part of the patient and an awareness on the part of the doctor will facilitate early diagnosis. A long history of vague ocular complaints, such as fatigability of the eyes which is not necessarily associated with reading, headache, photophobia, and the wearing of tinted glasses, or blurring which cannot be interpreted from the results of thorough ocular examination, is suggestive evidence. This is particularly true if several pairs of glasses have been prescribed during a relatively short time by the same or different examiners. A confession of nervousness on the part of the patient is helpful, yet many patients resent the fact that previous examiners had stated that the trouble was due to nervousness. Repeated sighing, twisting of the head during examination, blinking, hesitant but accurate reading, and exaggeration may be signs. The presence of hyperphoria is much more frequent in the psychoneurotic person than in the normal. Diagnosis is not made by exclusion of organic disease but depends upon establishing the presence of a maladjustment or fear that is related to the occurrence of symptoms. Those who arbitrarily diagnose as psychoneurotic all patients having symptoms but no specific findings are as much in error as those who would diagnose all patients with headache as having brain tumor.

Many patients with functional disturbances are at first emphatic in their denial of psychoneurosis and it is not infrequent that the examiner hears, "I am not psychoneurotic," even before the ocular examination has been made. The use of the term is quite common among the laity and to them it is often synonymous with slightly insane or imaginary disease. Often after a previous examiner has made such a diagnosis without adequately explaining the meaning and relationship there is resentment toward that doctor. Furthermore, in the greatest number of patients it is not necessary to obtain an elaborate history of the emotional life, for the intelligent person immediately sees the relationship between his frustration and symptoms.

Not only ophthalmologists but medical people in general have been confused and bewildered by the explanations of these conditions that have been made by psychiatrists. This is unfortunate and unnecessary, for a special vocabulary is not required to understand the reasons for the occurrence of a neurosis, nor is an elaborate psychiatric technique needed for adequate therapy of the greatest proportion of patients. Once one understands the basic and contributing causes for the disease, the treatment becomes self evident.

Initially there exists a susceptible constitutional state, which is demonstrated by the fact that some people have practically no tendency toward neurosis while others are easily induced to develop symptoms. The inherent mental attitude may be one of introspection, apprehension, and sensitiveness, which leads to fear of bodily disease, fear of failure in business, school, or social life, or fear of disaster for physical, mental, or moral reasons. To some degree these qualities are present in the normal person, but in the psychoneurotic they are exaggerated, and much time and effort is expended in contemplating or attempting to adjust for them.

Those susceptible to functional dissease are extremely suggestible and any statement made by a person of authority is accepted with its fullest implications, and once accepted becomes exceedingly difficult to eradicate. Parents, teachers, doctors, lecturers, and reading material exert a profound influence on the mental activity of such people. Children are especially suggestible, and very frequently fears and other reasons for maladjustment are implanted early in life only to become apparent in later years. Rather casual remarks may be interpreted in terms of impending disaster. Such a state is illustrated by the cardiac neurosis existing in an adult as the result of a doctor saying during an acute childhood illness, "We will have to watch that heart." Numerous examples could be quoted concerning the various organs, but the author is most familiar with those referable to the eyes, which include the fancied injury resulting from ordinary bright light, reading in bed, working with poor illumination, not using glasses, or using improper lenses. Eye strain has been interpreted to mean physical injury and to lead to almost anything, including loss of vision.

From the Department of Ophthalmology, College of Medicine, State University of Iowa.

EDITOR'S NOTE.—Paper prepared for reading by Dr. Leinfelder, honor guest of the Section on Eye, Ear, Nose and Throat, State Medical Association of Texas, at the Annual Session, Galveston, Texas, May 8-10, 1945, cancelled because of war conditions.

Once the background is set, symptoms will develop during any period of stress. The type and site of symptoms are dependent upon fears that have accumulated during the past life, while the degree of distress varies with the constitutional predisposition that is present. The more mildly affected patients have relatively little trouble, and their lives are for the most part happy and healthful, but the severely psychoneurotic person may not know a painless moment. Severely psychoneurotic persons do not constitute the majority of patients, and their deeply imbedded functional disease makes therapy more difficult or impossible. In mildly affected patients there occur intervals when the usual well-being is lost and symptoms develop; an interpretation of why this happens is necessary for complete understanding of a neurosis. In almost every case one is able to determine that some inciting factor is responsible for the occurrence of symptoms and for which it is convenient to use the word frustration. The frustration occurs because of some unsatisfactory or unfortunate event that causes the patient to worry or rebel. Thus family troubles, difficulty in school or business, social problems, injustices, or sickness may lead to mental overactivity and fatigue that result in symptoms such as loss of sleep, tiredness, pounding of the heart, pains in various parts of the body, inability to concentrate, headache, blurring of vision, difficulty in reading, aching of the eyes, or other symptoms. These symptoms add to the worries of the patient and things go from bad to worse, for now the state of health also becomes a problem. All previously suggested consequences are remembered and dread of their impending occurrence follows. This state of affairs continues with increasing severity until either the initiating circumstances correct themselves—a frequent event in most people—or the patient receives adequate treatment.

It is obvious that physical examination and reassurance alone will not effect a cure. It will lessen the distress, but only if at the same time the fundamental cause is eliminated will a complete cure result. If the cause of frustration remains, it is only a matter of time before new symptoms appear that will require further examination and treatment. Reassurance or psychotherapy is therefore effective only when through coincidence the initiating circumstances is corrected at about the same time as the examination. Therapy must be directed at the cause as well as at the results. The patients must be made to realize that the trouble begins with the frustration and that this must be corrected or adjusted to before complete physical health will be regained. Many times this is very easily affected, but occasionally the help of a psychiatrist is required. Since many of these patients are not communicative, at least to the ophthalmologist, it is necessary to have another approach than the usual devices of "confession" utilized by the psychiatrist. This is done through careful explanation of the causes of frustration and the relationship between the fatigue thus developed and the recurrence of symptoms. It is wise to avoid mention of neurosis and psychoneurosis since most patients resent the implications of the terms. Reference to mental and nervous fatigue is usually understood, and the patient is able to appreciate that these result from worry over problems in his life. Quoting examples of frustration that have led to symptoms in others assists the patient in coming to an understanding of his own troubles.

No age group is exempt from psychoneurotic symptoms. In young people many complex circumstances exist that lead to worry or dissatisfaction. Undue parental influence, social maladjustments, physical handicaps, sexual problems, disillusionment, scholastic problems, and occupational dissatisfaction may lead to psychoneurotic symptoms in children and young adults. It is important to recognize these, for unless diagnosed and treated, the functional disease becomes more firmly implanted and more difficult to cure as the patient grows older. In older patients similar reasons for frustration exist. In this group, however, one finds a greater variation in degree of involvement, and only the milder forms, which, however, are common, can be treated satisfactorily without the aid of the psychiatrist.

Preventative measures should always be utilized and extreme care should be taken to prevent, as far as possible, the suggestion of serious consequences resulting from disobedience of instructions. So many patients have long standing apprehensions concerning the damage that has resulted from a variety of circumstances that it seems a mistake to tell patients that injury to the eyes will result from a variety of minor circumstances. Much more damage has been done to personalities by such alarmist advice than could possibly result from certain so-called abuses.

A. M. A. BROADCASTS RESUMED DECEMBER 15

A dramatized radio health program, "Doctors at Home," will be resumed over the national network of NBC and associated stations on December 15, according to the November 17 issue of *The Journal of the American Medical Association.*

TRANSACTIONS

SPECIAL CALLED MEETING OF THE HOUSE OF DELEGATES OF THE STATE MEDICAL ASSOCIATION OF TEXAS

WACO, TEXAS, NOVEMBER 13, 1945

The House of Delegates was called to order by President Dr. H. F. Connally of Waco, at 10:00 a. m., Tuesday, November 13, 1945, in the Crystal Ballroom, Hotel Roosevelt, Waco, Texas.

FIRST REPORT OF REFERENCE COMMITTEE ON CREDENTIALS

Dr. J. M. Campbell: Mr. President, 49 regular delegates and 20 ex-officio delegates have been seated, a total of 69.

President Connally: We will have the roll call at this time.

The roll was then called, and during the calling of the roll other delegates entered so that at the end of the roll call 85 delegates and ex-officio members of the House had reported present.

Secretary Taylor: Mr. President, 85 delegates have answered the roll call.

The membership of the House of Delegates as developed on roll call, and as added to thereafter, was as follows:

MEMBERSHIP OF THE HOUSE OF DELEGATES

Angelina—M. O. Gibson.
Armstrong-Donley-Childress-Collingsworth-Hall—E. W. Jones.
Bell—A. C. Scott.
Bexar—John W. Goode, L. B. Jackson, R. E. Parrish, J. B. Copeland.
Brown-Comanche-Mills-San Saba—James M. Campbell.
Caldwell—A. A. Ross, Sr.
Cameron-Willacy—Ralph E. Utley.
Cass-Marion—Ernest W. Grumbles.
Cherokee—J. M. Travis.
Collin—Will C. Wright.
Coryell—T. M. Hall.
Dallas—G. A. Schenewerk, Jo C. Alexander, Edward White, David W. Carter, Jr., G. E. Brereton.
Delta—Osler Y. Janes.
DeWitt—J. G. Burns.
Eastland-Callahan—M. L. Stubblefield.
Ellis—S. H. Watson.
Falls—T. G. Glass.
Freestone—Wm. P. Harrison.
Grayson—W. A. Lee.
Grimes—S. D. Coleman.
Hardin-Tyler—Watt Barclay.
Harris—John T. Moore, Hugh C. Welsh, M. B. Stokes, Wm. J. Snow, Edward T. Smith.
Hidalgo-Starr—H. E. Whigham.
Hill—C. C. Campbell.
Jefferson—L. C. Powell.
Johnson—W. P. Ball.
Karnes-Wilson—J. W. Oxford.
Kaufman—Dave H. Hudgins.
Kerr-Kendall-Gillespie-Bandera—D. R. Knapp.
Kimble-Mason-Menard-McCulloch—Glenn H. Ricks.
Kleberg-Kenedy-Lamar—T. W. Buford.
Lampasas-Burnet-Llano—R. R. Shepperd.
LaSalle-Frio-Dimmit—B. E. Pickett, Sr.
Liberty-Chambers—A. R. Shearer.
McLennan—H. R. Dudgeon.
Milam—Clifford G. Swift.
Nolan-Fisher-Mitchell—Amos H. Fortner.
Nueces—C. P. Yeager, C. F. Crain.
San Patricio-Aransas-Refugio—J. H. Finn.
Smith—Thomas M. Jarmon.
Tarrant—S. J. R. Murchison, Jack M. Furman, Jr., R. J. White.
Taylor-Jones—O. W. Little.
Titus—T. S. Grissom.
Travis—J. C. Thomas, H. A. Scott.
Washington—G. A. L. Kusch.
Wharton-Jackson-Matagorda-Fort Bend—R. G. Johnson.
Wichita—Percy K. Smith.
Williamson—M. R. Sharp.
Wood—A. A. McDaniel.

EX-OFFICIO MEMBERSHIP

President—H. F. Connally.
President-Elect—C. C. Cody.
Vice-President—R. G. Johnson.
Vice-President—E. W. Wright.
Vice-President—H. E. Whigham.
Secretary—Holman Taylor.
Board of Trustees—T. C. Terrell, Secretary; W. B. Russ; E. W. Bertner.
Councilors—A. H. Fortner; E. A. Rowley; R. E. Windham; C. E. Scull, Chairman; R. T. Wilson, Secretary; F. J. L. Blasingame; J. E. Clarke; A. E. Sweatland; G. V. Brindley; C. C. Nash.
Council on Medical Defense—A. P. Howard; W. L. Baugh.
Committee on Legislation—J. H. Burleson, Chairman; Joe Gilbert, L. H. Reeves, O. F. Gober.

President Connally: We will now have the reading of the minutes of the previous session.

Secretary Taylor: The minutes of the last session of the House of Delegates were published in the June, 1944, number of the TEXAS STATE JOURNAL OF MEDICINE under the heading "Transactions."

On motion of Dr. E. W. Bertner, seconded by Dr. L. H. Reeves, the reading of the minutes was dispensed with, and the minutes as printed in the June, 1944, issue of the TEXAS STATE JOURNAL OF MEDICINE were adopted.

Secretary Taylor announced that the President had appointed the following reference committees for this meeting:

REFERENCE COMMITTEES

Reference Committee on Credentials—Hall Shannon, Chairman; F. E. Felder; E. W. Jones; C. D. Williamson; J. M. Campbell.

Reference Committee on Reports of Officers and Committees—L. B. Jackson, Chairman; J. T. Darwin; Noble H. Price; S. H. Watson; T. G. Glass.

Reference Committee on Resolutions and Memorials—A. A. Ross, Chairman; E. W. Grumbles; S. D. Coleman; C. C. Cleveland; M. B. Stokes.

Reference Committee on Finance—H. E. Wigham, Chairman; W. A. Lee; A. C. Traweek, Sr.; G. A. L. Kusch.

Reference Committee on Amendments to the Constitution and By-Laws—Wm. P. Harrison, Chairman; Talbot A. Tumbleson; I. T. Shotwell; R. R. Shepperd; E. H. Marek.

Reference Committee on Scientific Work—B. E. Pickett, Chairman; T. M. Jarmon; J. G. Burns; O. Y. Janes; Frank I. Reid.

Reference Committee on Medical Service and Public Relations—S. H. Watson, Chairman; Houston H. Terry; G. A. Schenewerk; S. D. Coleman; Chas. P. Yeager.

President Connally: This is going to be something unusual. There isn't going to be any President's address. I hope this meeting will be held in peace, with harmony prevailing throughout. The meeting has been called by me for the purpose of

transacting any business that may properly come before the House of Delegates at this time that cannot be carried over until the next annual meeting. I have nothing definite to bring up.

Dr. L. B. Jackson of Bexar: We have met in called session for the purpose of passing on some questions that should be settled before our next annual meeting. During the second world war, out of which our nation has emerged as the greatest nation the world has known, it was necessary to change many of our habits and customs. One of these customs which has grown dear to the hearts of the medical men of Texas was our annual meeting, which we cheerfully postponed because we were told it was a matter of military importance that we not have large meetings, requiring transportation and hotel accommodations which were sorely needed by the armed forces. That was the fault of no one; it was the fortune of war.

This question has arisen in the minds of many: Should we have a meeting, hear committee reports and elect officers for another year? That is not an unnatural question. President Dr. Connally has carried on the work as leader of the State Medical Association in an untiring and able manner; he has carried on under great difficulties, and has been faithful. I believe he should be permitted to make his report at the annual meeting of the Association at the stated time for its meeting. I believe his committees have worked hard on some very difficult assignments and should have the privilege of making their reports at the regular meeting of the Association. The House of Delegates comprises but a small part of the entire membership of the Association, and each member is entitled to hear these reports. Among the most important appointees of a president of our Association are the section chairmen, made up, on this occasion, for the most part, of ambitious young men who have taken pride in and who have done much hard work in preparing the program of their respective scientific sections. They are ready, and I believe they have a right to the opportunity of presenting their programs at the regular meeting of the Association. This is not the first time the State Medical Association of Texas has had its annual meeting disarranged by war. It missed more than one year during the war between the states.

There is another excellent reason why we should not complete our year at this time. Dr. Cody would have only half a year to serve as President of the Association. I believe Dr. Cody is one of the most brilliant men in medicine in this State, and I know this House of Delegates concurs heartily in that belief. I believe this House of Delegates joins me in demanding that he give us a full year of leadership. His wisdom and experience are capable of serving us well during what will almost surely be the most trying year through which we will be called upon to pass. Thousands of our doctors will then be going through the discouraging period of relocation and readjustment after getting out of the Army. Other vital questions will come up for solution.

In conclusion, I propose to this House that we instruct Dr. Connally to continue his presidency until the time of the next regular meeting, and that we assure our distinguished President-Elect that we will not be content with less than a full year of leadership from him. I move the adoption of this recommendation.

Dr. W. P. Ball of Johnson: I second that motion. (Applause.)

President-Elect Cody: I join the two distinguished speakers who preceded me in hoping that this meeting can be conducted in harmony. I can see no particular reason for any display of feeling one way or the other. There is not the slightest question but those who differ with me have the welfare of the State Medical Association just as well in mind as I have. In this kind of discussion, however, we very frequently find that both sides are right. I have thought over this matter a good deal, and the thought that I am presenting to you now strikes me as being in the long run the one that will work out more satisfactorily for the State Medical Association than any other procedure that I can devise.

I was elected President-Elect in 1944, with my term as President to expire in May of 1946. I had a meeting with Dr. Connally at Bryan on May 1, 1945, at which we discussed the question of succession. Dr. Connally had been advised by telephone of an interpretation that had been placed on the situation by the General Attorney of the Association, or some one in the General Attorney's office, of the State Medical Association, and that interpretation was, to make it quite brief and to the point, that the officers, committees, councils and so on should remain in status quo until the postponed annual meeting could be held. My recollection and understanding of the agreement that Dr. Connally and I had at that time, is that this was wartime; that necessary adjustments should be made, could be made and ought to be made, and as a part of that, whether the meeting of the House of Delegates was deferred a few weeks, a few months or a year was of no particular consequence. The main thing was to get on with the war and get through with the difficult situation as rapidly and as easily as we could. The Trustees of the State Medical Association confirmed my recollection of the understanding and agreement that I had with Dr. Connally, in the official statement that is published in the TEXAS STATE JOURNAL OF MEDICINE. On page 55, June, 1945, number of the JOURNAL, there is this paragraph:

"The meeting of the House of Delegates when permitted will be a postponed annual meeting, at which the usual business of the Association is conducted."

The restrictions on conventions were removed by the Office of Defense Transportation in mid-September. The circulation of a post card petition, which post cards some of you have probably received, and which I have only heard about, was conducted in October. The signatures of some 68 delegates to the petition were not announced, so far as I know, and I was in Fort Worth last Tuesday to read a paper before the Tarrant County Medical Society, and paid my respects to the headquarters office, at which time and place Dr. Taylor showed me one of the cards.

Now, Dr. Buie, in 1942, had the last regular annual session of the Association, at Houston. Since that time meetings of the House of Delegates have been technically and actually special meetings. The late Dr. Judson Taylor set the precedent for wartime meetings of the House of Delegates. If Dr. Judson Taylor had insisted on the regular annual session, one of his Vice-Presidents would be President today; Dr. Venable would be President-Elect, and neither Dr. Connally nor I would have been elected President. Dr. Venable followed the precedent set by Dr. Taylor, and this precedent, it seems to me, essentially was that Dr. Taylor decided that he would serve the time to which this House had elected him President. Now, Dr. Taylor's successors in office have hitherto registered no objection to the precedent set by him. My successors shall likewise have no cause for complaint of me. As I see it, the majority of the membership of this House have the qualifications to be President of the State Medical Association. There is the opportunity in a man's career to be President only once in thirty times. I wish to have my once and then

pass it on, as Dr. Taylor has done. Regardless of when my term begins or when I am installed, it is my wish and desire that it end on the last day of the annual session in May of 1946, which is the time that the House of Delegates electing me intended that it should be. The unexpired term as President may be six months, a few weeks or a few hours. If an unexpired term of six months is sufficient for the President-Elect of the American Medical Association, the State Medical Associations of New York, Pennsylvania, Virginia, Indiana and several others, it is also enough for me. That is, during wartime, and we are still at war. What happens to me is of no particular significance.

The absence of an agenda in the official call for this meeting indicates a question as to the constitutional procedure to be followed in the meeting today. This question can be decided by the House of Delegates. The Executive Council, by precedent during the war and by Article VII, Section 2, of our Constitution, has the authority to fix the time and place of the annual session of the House of Delegates to meet unforeseen emergencies. The Executive Council can decide whether or not to have a postponed annual session of the House of Delegates today, with such reports of officers as may be ready, and the election and installation of officers. This question can be decided by one of two methods. It may either be referred to the Executive Council as a Reference Committee, or the House of Delegates can resolve itself into the Executive Council as a whole and take under consideration the question of holding the postponed annual session of the House of Delegates today. The latter is simpler and easier and quicker, too.

I, therefore, move to amend the motion previously made to the effect that the House of Delegates resolve itself into Executive Council as a whole, and take under consideration the question of the postponed annual session of the House of Delegates, meeting forthwith in this room. In the event the motion prevails, the committee as a whole can decide the agenda that shall be followed. In the event the motion fails, we go on as we have been for the past six months.

It is my interpretation of the Constitution and By-Laws that my term of office as President expires on the last day of the annual session to be held in May. In that event, I would have a term of an hour or two. The House of Delegates elects a President-Elect. My term as President having expired, the President-Elect would be required under the Constitution to call a meeting of the Board of Councilors within two weeks for the purpose of electing one of the Vice-Presidents as President. The President-Elect takes office one year from the date of his election.

Dr. T. W. Buford of Lamar seconded the amendment of Dr. Cody, to go into committee of the whole for the purpose of setting a time for the postponed annual session of 1945.

President Connally: Dr. Cody will restate his amendment.

President-Elect Cody: I move to amend the motion of Dr. Jackson, to the effect that the House of Delegates resolve itself into Executive Council, or committee of the whole, to take under consideration the question of a postponed annual session of the House of Delegates.

President Connally: I am going to rule that amendment out of order on the ground that the House of Delegates has no authority to call this meeting for the purpose of electing officers.

Dr. John T. Moore of Harris: I would not, in discussing this amendment, say a word or do a thing that would in any way take away any of the good work done by the President or in any way reflect upon his work or that of any of the others. I don't know whether you all know it or not, but I know that we have been in a war, and a hell of a war at that, both at home and at the front. We have had to give up a lot of our pet ideas here and there, and have had to content ourselves with the clothes and food we had, and in many other respects have had to conduct our business on an entirely abnormal basis. I have no axe to grind here. I have no idea of opposing or favoring any person. There are a number of matters that ought to have attention now, and I do not mean to intimate that the present officers could not carry on and meet these emergencies, whatever they are.

Speaking directly to the amendment, I believe that it is perfectly proper and germane. This House of Delegates can make amendments and motions and pass them or turn them down, as it chooses. This is a postponed meeting of the House of Delegates. We have a right to vote upon this amendment. I am heartily in favor of voting not to sustain the chair in ruling that the amendment is out of order.

Secretary Taylor: There has been no appeal from the ruling of the Chair.

Dr. Moore: I move that the Chair be not sustained in his ruling that this amendment is out of order.

President Connally: Dr. Moore has appealed from the ruling of the Chair that Dr. Cody's amendment is out of order.

Dr. Shearer: I second the appeal. I would like to know just why it is not germane and therefore out of order.

Dr. Buford: A point of order. Both the motion and the second were out of order. It should be, "I wish to appeal the ruling of the Chair to the House of Delegates."

Dr. H. R. Dudgeon, McLennan: Does not an amendment to a motion have to be accepted by the maker of the original motion before it can be voted upon?

President Connally: I would not say positively that it does, but it is customary. This motion is open for discussion if anyone wants to discuss it.

Upon request of President Connally, Vice-President H. E. Whigham of McAllen, then assumed the Chair.

President Connally: The motion of Dr. Moore to overrule the Chair in this matter is not permissible under either Roberts' Rules of Order or our Constitution and By-Laws. Chapter XVI of our by-laws says that the deliberations of this Association shall be governed by parliamentary usages as contained in Roberts' Rules of Order, unless otherwise provided by this Constitution and By-Laws. Roberts' Rules of Order, Revised Edition, Page 201, says that any motion is out of order that conflicts with the laws of the nation, the state, or the By-Laws and Constitution of an assembly, and even if the motion is carried by unanimous vote of the House, it is still null and void. That is the basis of my ruling.

This is not a delayed annual session. The post card petition for such a meeting was disregarded by me when I called this meeting. It was disregarded because the majority of those who sent the post cards in had an idea that the cards were official, and that they came from the executive department of the Association. I wrote a letter of explanation to each delegate who sent in one of the cards, and I had replies from more than 50. I checked my list this morning, and assure you that if there were as many as 30 delegates insisting on holding a meeting of the House of Delegates, I would be glad to call it. There were over 50 replies to my letter and there were only three who said that they still thought we ought to have a meeting.

That post card, I think, was a reflection on the intelligence of this House of Delegates. I don't know who wrote it or who mailed it, but, in the first place, it was directed to the Secretary of the Association, who has no authority to call a meeting of the House of Delegates except when asked by the President to do so. The post cards did not ask the State Secretary to call this matter to the attention of the President. It was entirely irregular. Whoever sent the cards out ought to have the courage to admit doing so. Anyway, it was no way to call a meeting of the House of Delegates.

Dr. Moore's interpretation that this is a postponed annual meeting is all wrong. Even the Executive Council had no right to call an annual session unless they had done it at the time they were in session at Dallas last year. This cannot be a postponement of that meeting. We adjourned that meeting. I adjourned it. The Constitution and By-Laws provide that the election of officers must be held on the last day of a regular annual session, and that only those who are in attendance are eligible for election to office. There are other points to sustain my ruling. The meeting that Judson Taylor was holding, was in three different parts, held at three different places. The meeting of the House of Delegates was held in a normal sort of way. When the problem of our next annual session came up, our General Attorney said that all officers, section chairmen and secretaries, committees, councils and so forth must stay in status quo until the regular meeting. Secretary Dr. Taylor protested the ruling, because the By-Laws say that the President-Elect should be elected for one year. The General Attorney stuck to his ruling, that Dr. Cody would hold over the same as the other officers.

I have no objection to the Executive Council holding a meeting and calling for an adjourned session, or any kind of a session it wants to, but we don't have any right to ask for that sort of thing. There is no provision in the By-Laws for such action, and I was not asked to do it by anybody. I was in close touch with Chairman Dr. Thompson of the Board of Trustees, Chairman Dr. John Burleson of the Legislative Committee, and Dr. C. E. Scull, Chairman of the Board of Councilors, either one of whom had the authority to ask me to call a meeting of the Executive Council, and each one told me he thought it would be to the best interests of the State Medical Association not to hold a meeting of the Executive Council.

Dr. Buford: What is the way to appeal from the ruling of the Chair?

Vice-President Whigham: Let me read from Roberts' Rules of Order:

"When a member wishes to appeal from the decision of the Chair, he rises as soon as the decision is made, even though another has the floor, and without waiting to be recognized by the Chair, says: 'Mr. Chairman, I appeal from the decision of the Chair.' If this appeal is seconded, the Chair should state clearly the question at issue and his reason for the decision if he thinks it necessary and then state the question thus: 'The question is, shall the decision of the Chair stand as the judgment of the assembly or shall the decision of the Chair be sustained?' To put the question he would say: 'Those in the affirmative say "aye",' and after the affirmative vote has been taken, he will say: 'Those in the negative say "no".'"

Dr. Moore: I pretty nearly agree with the Chairman in what he has stated, but he has talked about things that I am not talking about. It has not come to issue yet. The purpose of this amendment is to bring to this body the right to pass upon questions that have been passed upon by two or three or four people, only. I am not at this time stating an opinion. I am asking for an appeal from the Chair because I think the Chair has made a mistake on the intent of the amendment. The intent of the amendment, if it destroyed the motion, ought not to prevail, but it in no wise affects the original motion. The amendment is that we go into a committee of the whole, which any Congress or any Legislature can do at any time, and neither the Chair nor anybody else can prevent it, unless the Chair rules it out of order; and then comes the appeal from the Chair. I do not accept the part of Roberts' Rules of Order just read as in any way affecting this amendment. It is an entirely different thing. This amendment does not destroy anything. It merely provides that this House of Delegates go into a committee of the whole and decide the questions that have been decided by one or two or three or four people. The House of Delegates has had no opportunity to discuss the questions involved in the call of this meeting, and the questions about which I agree with the Chair are beside the point. The appeal from the Chair is to allow us to vote on the pending amendment.

(President Connally then resumes the Chair.)

President Connally: Is there any further discussion? The question is, shall the decision of the Chair be sustained. All those that favor sustaining the Chair will say "aye". All opposed "no". I think the "ayes" have it. The "ayes" have it, and the decision of the Chair is sustained.

Dr. Jackson's original motion is now before the House.

Dr. Jackson: My motion was that we instruct Dr. Connally to continue his leadership until the time of the next regular meeting, and that we assure our distinguished President-Elect that we will not be content with less than a full year of leadership from him.

President Connally: All in favor of Dr. Jackson's motion let it be known by saying "aye", opposed "no". The motion is carried.

Dr. Knapp: I think we are all agreed that we want Dr. Connally to finish this year. My second to Dr. Cody's amendment was with the idea that we would then be able to carry Dr. Cody over for the year following. I would like a ruling from the Chair as to how we can insure Dr. Cody's services for the year following?

Dr. Jarmon: I move that the House go into Executive Session for the purpose of transacting business under discussion.

President Connally: According to the ruling of our General Attorney, which ruling was accepted by the Board of Trustees of this Association, all officers will hold over. I am sure there isn't anyone in the State Medical Association who would question Dr. Cody's right to assume the office of President when my term expires.

Dr. Jarmon: I move that the House of Delegates go on record as reaffirming the election of the President-Elect, Dr. Cody, for the ensuing year beyond question

The motion was seconded by Drs. A. A. Ross, Sr. of Caldwell, L. H. Reeves of Tarrant and S. H. Watson of Ellis.

Dr. A. A. Ross, Sr., of Caldwell: I think this motion is very important. I think Dr. Cody is entitled to the endorsement of this House. He is entitled to a full year, and the profession of Texas are entitled to twelve months service by him as President. (Applause.) I call for a rising vote.

The delegates stood.

President Connally: Those who are opposed stand. The vote is unanimous. (Applause.)

Secretary Taylor presented a list of nominees for

Honorary Membership in the State Medical Association, as received from several county medical societies, and suggested that, in so far as the call for this special session of the House of Delegates provided for the transaction of any business proper to come before the House under the Constitution and By-Laws of the Association, and in view of the fact that nowhere in the Constitution and By-Laws of the Association is it required that Honorary Members be elected only at a regular session of the House of Delegates, the list of nominations might well be accepted and referred to the Board of Councilors as a Reference Committee, according to custom, and that, following approval by the Board of Councilors, there would seem to be no reason why they could not be elected to honorary membership status.

Following extended discussion and numerous points of order, it was decided that the procedure suggested by the Secretary could be legally and constitutionally followed, and the list submitted by the Secretary was referred to the Board of Councilors acting as a Reference Committee.

The Board of Councilors retired and brought back the recommendation that the following nominees for honorary membership in the State Medical Association be elected to that status, and they were so elected:

ELECTION OF HONORARY MEMBERS

Armstrong-Donley-Childress-Collingsworth-Hall Counties Society: Dr. Berry L. Jenkins, Clarendon, born 1867, member of the State Medical Association 1904-1910; 1915 through 1945.

Armstrong-Donley-Childress-Collingsworth-Hall Counties Society: Dr. Oscar L. Jenkins, Dallas, born 1895, member of the State Medical Association 1921 through 1945.

Baylor-Knox-Haskell Counties Society: Dr. John F. Bunkley of Seymour, born 1862, member of the State Medical Association 1904-1905; 1909-1931, and 1933 through 1945.

Bell County Society: Dr. Lee Knight of Temple, born 1865, member of the State Medical Association 1904-1932; 1934 through 1938.

Bexar County Society: Col. Charles Franklin Craig of San Antonio, born 1872. (Colonel U. S. A., retired.) Member State Medical Association, 1945.

Colorado County Society: Dr. C. G. Cook of Weimar, born 1875, member of the State Medical Association 1904 through 1945.

Dallam-Hartley-Sherman-Moore Counties Society: Dr. John W. Norvell of Stratford, born 1876, member of the State Medical Association 1933 through 1944.

Ellis County Society: Dr. A. J. Cox, care Masonic Home, Arlington (formerly of Ennis), born 1868, member of the State Medical Association 1908-1927; 1929-1930, and 1933 through 1943.

Ellis County Society: Dr. Francis H. Jenkins of Waxahachie, born 1873, member of the State Medical Association 1906-1908; 1910 through 1944.

Grayson County Society: Dr. Joseph A. Mayes of Denison, born 1878, member of the State Medical Association 1906 through 1944.

Hidalgo-Starr Counties Society: Dr. Newton H. Bowman of Mercedes, born 1875, member of the State Medical Association 1908-1911; 1915-1916; 1919-1927; and 1929 through 1944.

Hill County Society: Dr. W. F. Treat of Whitney, born 1864, member of the State Medical Association 1910-1911; 1913; 1915-1917; and 1919 through 1944.

Lee County Society: Dr. William E. York of Giddings, born 1870, member of the State Medical Association 1904 through 1945.

Medina-Uvalde-Maverick-Val Verde-Edwards-Real-Kinney-Terrell-Zavala Counties Society: Dr. Horace B. Ross of Del Rio, born 1868, member of the State Medical Association 1904 through 1945.

Palo Pinto-Parker Counties Society: Dr. J. H. McCracken of Mineral Wells, born 1867, member of the State Medical Association 1904 through 1945.

Tom Green-Eight Counties Society: Dr. Joseph K. Griffith of Robert Lee, born 1866, member of the State Medical Association 1923-1926; 1928; 1932 through 1945.

Tom Green-Eight Counties Society: Dr. Jesse S. Hixson of San Angelo, born 1868, member of the State Medical Association 1908 through 1945.

Tom Green-Eight Counties Society: Dr. John R. Sessums of San Angelo, born 1876, member of the State Medical Association 1904 through 1945.

Upon motion of Dr. Bertner, seconded by Dr. L. H. Reeves, the following amendment to the Constition, which has been pending since the last regular session of the House of Delegates, was adopted:

AMENDMENT TO THE CONSTITUTION

"Amend Section 1, Article II, of the Constitution, page 3 of the January 1, 1941, edition, by adding to the section the following language: 'It is also provided that County Societies may elect to military membership those members who are at the time serving with the Armed Forces of our country, including the Coast Guard, and such similar services in time of war, such membership to terminate with their discharge from service.'"

Upon motion of Dr. Bertner, seconded by Drs. Moore and Jarmon, the following amendment to the Constitution, which has been pending since the last regular session of the House of Delegates, was adopted:

AMENDMENT TO THE CONSTITUTION

"Amend Section 2, Article I, of the Constitution, page 3 of the January 1, 1941, edition, by adding to the section the following wording: 'The Association shall have the right and the authority through its proper agencies, when acting only in its protection, to regulate fair dealings among the members of the Association, to maintain and advance the standards of medical practice, and enact By-Laws regulating such matters.'"

Upon motion, duly seconded, the House adjourned sine die.

FLUORESCENT LIGHT IS NOT HARMFUL

Does fluorescent light possess harmful qualities not found in other forms of artificial illumination? The Council on Industrial Health of the American Medical Association says "No."

Following an investigation by a joint committee on Industrial Ophthalmology, the Council, through its secretary, C. M. Peterson, M. D., reports in the A. M. A. *Journal* of August 25:

"Fluorescent lighting is not harmful to vision. It should not cause eyestrain if properly installed and used."

It was found that the light from fluorescent lamps resembles daylight more closely than that from tungsten-filament lamps. "This color resemblance to daylight," the Council reports, "is a desirable quality," adding:

"Infra-red energy found in fluorescent lighting as now manufactured produces no known physiologic effect except that due to heating. Fluorescent light generates less heat per candlepower than tungsten lamps.

"Glare occurs in any system of lighting. . . . Excessive light may produce symptoms of eyestrain in susceptible individuals regardless of source. Constitutional factors should be corrected as well as the amount and kind of light."

MEDICAL OFFICERS RETURNING TO TEXAS*

(Corrections: Emmett L. Allamon has returned to Beaumont instead of Dallas. M. H. Appel, Alice, has not yet been released from service.)

NAME	Serv.†	Location	Release Date
Anderson-Houston-Leon Counties			
1. Bell, Robert H.	A	Palestine[1]	Sept., 1945
Atascosa County			
1. Shotts, Chester C.	A	Pleasanton	
Bee-Live Oak-McMullen Counties			
1. Lancaster, Howard E.	A	Beeville	Oct., 1945
2. McNeill, Scott	A	Beeville	
Bell County			
1. Mewhinney, Logan U.	A	Holland	Nov., 1945
Bexar County			
23. Cherry, Robert L.	U	San Antonio[2]	Oct., 1945
24. Cowles, A. G.	A	San Antonio	Oct., 1945
25. Culmer, John W.	A	San Antonio	
26. Edens, Clarence	A	San Antonio	
27. Gerodetti, O. F.	A	San Antonio	
28. Giesecke, Carl G.	A	San Antonio	Sept., 1945
29. Hargis, William H.	A	San Antonio	
30. Henry, C. D.	A	San Antonio	Oct., 1945
31. Herndon, G. Cole	A	San Antonio[3]	Sept., 1945
32. Hicks, Yale, Jr.	A	San Antonio	
33. Hill, Herbert	N	San Antonio	Oct., 1945
34. Lee, Jack B.	A	San Antonio	
35. Monsalvo, Rudolph O.	A	San Antonio	
36. Palmer, Joseph W.	A	San Antonio	Feb., 1946
37. Perez, Alfred	A	San Antonio	
38. Russ, Stirling E.	A	San Antonio	Dec., 1945
39. Schlecte, Marvin C.	A	San Antonio	
40. Steele, Virgil S.	A	San Antonio	
41. Sutton, Robert M.	A	San Antonio	Oct., 1945
Bosque County			
1. Witcher, S. L.	A	Clifton	Oct., 1945
Brazoria County			
1. Laurentz, Fred K.	A	Angleton	
Brazos-Robertson Counties			
2. Searcy, T. A.	A	Hearne	
Brooks-Duval-Jim Wells Counties			
5. Smith, R. N., Jr.	N	Falfurrias	
Brown-Comanche-Mills-San Saba Counties			
3. Farley, Frederick W.	A	San Saba	Oct., 1945
4. Gentry, Thomas C.	A	New York, N. Y.[4]	
5. Melvin, James H., Jr.	A	Brownwood	
6. Pate, Joe J.	A	Brownwood	
Cameron-Willacy Counties			
3. Baden, Erwin E.	A	Raymondville	
4. De La Garza, William	A	Brownsville	
5. Ryan, Glen V.	A	Harlingen	
Camp County			
1. Reitz, Percy A.	A	Pittsburg	
Colorado County			
1. Laughlin, Jones C.	A	Eagle Lake	Oct., 1945
Cooke County			
1. Cunningham, E. S.	A	Gainesville	
2. Hawk, Hiram P.	A	Gainesville	Oct., 1945
Dallas County			
20. Alessandra, Samuel A.		Dallas	
21. Austin, Dale J.	A	Dallas	
22. Barta, Chester K.	A	Dallas	
23. Bass, James W.	A	Dallas	
24. Bounds, Murphy		Dallas	
25. Butte, Felix L.	A	Dallas	Dec., 1945
26. Davis, Leo Goudchaux		Dallas	
27. Denton, Guy T., Jr.	A	Dallas	Dec., 1945
28. Downs, James T., III	A	Dallas	
29. Harwood, George W.	A	Dallas	
30. Herndon, James H.	A	Dallas	
31. Hilliard, George M.	A	Dallas	
32. Kaufmann, Maurice	A	Dallas	
33. Merriman, George J., Jr.	A	Dallas	
34. Miller, Tate	N	Dallas	Feb., 1946
35. Minnett, John S.	A	Dallas	
36. Park, Barton Enoch		Dallas	
37. Reed, Emil Patrick	A	Dallas[1]	Feb., 1946
38. Rucker, John C.	A	Dallas	
39. Scales, John Garver		Dallas	
40. Shelburne, Samuel A.	N	Dallas	Oct., 1945
41. Sbort, Robert F., Jr.	N	Dallas	
42. Small, Andrew Buchanan		Dallas	
43. Stuart, Samuel E.	A	Dallas	
44. Talkington, Perry Clement		Dallas	
45. Woolf, Martin P.	A	Dallas	
46. Bennett, Thomas R., Jr.	A	Dallas	Sept., 1945
Denton County			
2. Yarbrough, C. G.	A	Denton	Oct., 1945
Eastland-Callahan Counties			
1. Brazda, Adolph W.	A	Ranger	
Ector-Midland-Martin-Howard-Andrews-Glasscock Counties			
2. Devereux, J. M.	A	Midland	
3. Johnson, Homer Baker	A	Midland	
4. McIntire, Landon R.	A	Big Spring	
5. Thomas, Clyde E., Jr.	A	Big Spring	
El Paso County			
2. Balko, Andrew J.	A	El Paso	
3. Dailey, Jeremiah A.	A	El Paso	
4. Ravel, Vincent M.	N	U. of Pa., Philadelphia, Pa.[2]	
Fannin County			
1. Morgan, Lewie	A	Bonham	Oct., 1945
2. Williams, E. C.	A	Bonham	Oct., 1945
Galveston County			
1. Clark, Albert I.	A	Galveston	
2. Magliolo, A. J.	A	Dickinson[3]	Jan., 1946
3. Schneider, Martin	A	Galveston	
4. Shelton, Elvin L., Jr.	A	Galveston	
Gray-Wheeler Counties			
1. Gooch, James O.	A	Shamrock	
Grayson County			
1. Cohen, Meyer	A	Denison	Sept., 1945
2. Hardy, John M.	A	Sherman	
Gregg County			
6. Routon, William M.	A	Kilgore	
Grimes County			
2. Harris, Gracelus C.	A	Navasota	
Hamilton County			
2. Hedges, Homer V.	A	Hico	
3. Martin, Scott H.	A	Hamilton	
Harris County			
46. Barkley, Howard T.	A	Houston	Oct., 1945
47. Brady, Randle J.	A	Houston	
48. Bruhl, Charles K.	A	Houston	
49. Cockrell, John Aubrey	A	Houston	Oct., 1945
50. Cull, H. G.	A	Houston	
51. Faris, Arthur M.	A	Houston	Oct., 1945
52. Frachtman, H. Julian	A	Houston	Oct., 1945
53. Hamilton, Carlos R.	A	Houston	Oct., 1945
54. Heard, Jesse Griffin	A	Houston	Nov., 1945
55. Holliman, James H.	A	Houston	Oct., 1945
56. Kootsey, Joseph S.	A	Houston	Oct., 1945
57. Martin, James R.	N	Houston	Oct., 1945
58. Nicosia, Ralph V.	A	Houston	
59. O'Heeron, M. K.	A	Houston	Oct., 1945
60. Robinson, Webber T.	A	Houston	
61. Selke, Oscar O., Jr.	A	Houston	
62. Sellers, Fred W.	A	Houston	
63. Scobee, Richard G.	A	Houston	
64. Wagner, Ephraim L.	A	Houston	
65. Wolfe, Russell S.	A	Houston	
66. Burnett, Mathew D., Jr.	A	Detroit, Mich.[4]	Nov., 1945
Harrison County			
1. Talbot, George B.	A	Waskom	
Hidalgo-Starr Counties			
2. Caton, McKee	A	McAllen	Oct., 1945
3. Rodriguez, Mamilliano J.	A	Rio Grande City	
4. Southwick, Lloyd M.	A	Edinburg	Oct., 1945
5. Westphal, Herbert M.	A	Weslaco	

*EDITOR'S NOTE: This list is the second of a series in which it is hoped to name all those physicians who have been in the Armed Forces during the war just past and have now returned to Texas to resume civilian practice. The information in this list has been assembled from a variety of sources. While an attempt has been made to secure as complete and as accurate data as possible, we are aware that omissions and errors have been made. Not only for publication in the JOURNAL, but also for the permanent records in the central office of the State Medical Association, we invite and urge correction of and addition to the material here submitted. Note that physicians from each county area are numbered consecutively following those listed in the November JOURNAL; the last number in each section therefore indicates the total physicians returned to that county area. The complete total for Texas named to date (November 19), including the accompanying list, is 357.

† A=Army; N=Navy; U=U. S. Public Health Service.

[1]Formerly of Columbus.
[2]Formerly of Houston.
[3]Formerly of Fort Worth.
[4]Formerly of DeLeon.

[1]Formerly of Brownsville.
[2]Formerly of El Paso.
[3]Formerly of Galveston.
[4]Formerly of Houston.

NAME	Serv.†	Location	Release Date
Hopkins-Franklin Counties			
1. Galt, Jabez	A	Mount Vernon[1]	
2. Pate, John W.	A	Sulphur Springs	
Hunt-Rockwall-Rains Counties			
1. Allison, Joe M.	A	Emory	
2. Leberman, Lowell H.	A	Commerce	
Hutchinson-Carson Counties			
1. Lyons, Mason R.	A	Borger[2]	
Jefferson County			
12. Beyt, Frank J.	A	Port Arthur	Oct., 1945
13. Blum, Sigmund L.	A	Beaumont	Nov., 1945
14. Duren, Norman	A	Beaumont	
15. Heare, Louis C.	A	Port Arthur	Nov., 1945
16. Jones, Edmund D.	A	Beaumont	
17. Shaddock, Carroll B., Jr.	A	Beaumont	Dec., 1945
18. Smith, John M.	A	Little Rock, Ark.[3]	
Karnes-Wilson Counties			
1. Prather, Frank A.	A	Runge	
Kerr-Kendall-Gillespie-Bandera Counties			
1. Coleman, Jesse L.	A	Kerrville	
2. Packard, D. E.	A	Kerrville	Oct., 1945
Kimble-Mason-Menard-McCulloch Counties			
1. Anderson, James P.	A	Brady	Nov., 1945
Lamar County			
1. Stephens, John A.	A	Paris	
2. Walker, Marcellus A., Jr.	A	Paris	Nov., 1945
Lamb-Bailey-Hockley-Cochran Counties			
1. Dupre, John D.	A	Levelland	Oct., 1945
2. Phillips, C. M.	A	Levelland	Feb., 1945
Lampasas-Burnet-Llano Counties			
2. Rollins, Herbert F.	A	Lampasas	
3. Stapp, Celso C.	A	Burnet	
La Salle-Frio-Dimmit Counties			
2. Bannister, Mortimer H.	A	Pearsall	Oct., 1945
3. Beall, Wendell E.	A	Pearsall	Oct., 1945
Lavaca County			
1. Hermann, Robert C.	A	Selma, Ala.[4]	Jan., 1946
Limestone County			
1. Benavides, Simon I., Jr.	A	Thornton	
McLennan County			
4. Aynesworth, Morgan B.	A	Waco	
5. Dudgeon, Howard	A	Waco	
6. Manske, A. O.	A	Waco	Oct., 1945
Medina-Uvalde-Maverick-Val Verde-Edwards-Real-Kinney-Terrell-Zavala Counties			
1. Meyer, Walter B.	A	Hondo	
Milam County			
1. Richards, John T.	A	Rockdale	
Nacogdoches County			
1. McKinney, Edgar P.	A	Nacogdoches	Sept., 1945
Nolan-Fisher-Mitchell Counties			
1. Loeb, Sam A.	A	Sweetwater	Nov., 1945
2. Peters, Roland O.	A	Sweetwater	Sep., 1945
3. Rhode, W. S.	A	Colorado	Jan., 1946
Nueces County			
6. Clark, Dan	A	Corpus Christi	Oct., 1945
7. Gaddis, Herman W.	A	Corpus Christi	
8. Sharp, James C.	A	Corpus Christi	Jan., 1946
9. Yates, June	A	Corpus Christi	Oct., 1945
Palo Pinto-Parker Counties			
2. Allen, Platt L.	A	Weatherford	
Pecos-Jeff Davis-Presidio-Brewster Counties			
1. Lockhart, William E., II	A	Alpine	
2. Sibley, D. Jacobi, Jr.	A	Fort Stockton	
Potter County			
7. Flamm, Kenneth R.	A	Amarillo	
Randall-Deaf Smith-Parmer-Castro-Oldham Counties			
1. Sigler, Howard Y.	N	Hereford	1945
Reeves-Ward-Winkler-Loving-Culberson-Hudspeth Counties			
1. Zink, Linus A.	A	Pecos	
Rusk County			
2. Abney, Thomas B.	A	Overton	
San Patricio-Aransas-Refugio Counties			
2. Boykin, James M.	A	Taft	
Scurry-Dickens-Kent-Garza-Borden-King-Stonewall Counties			
2. Kahler, Glenn E.	A	Post	
Smith County			
1. Moore, Masters H.	A	Tyler	Aug., 1945
2. Neill, L. T.	A	Tyler	Oct., 1945
Tarrant County			
6. Conner, Cooper	A	Fort Worth	Oct., 1945
7. Goldberg, M. N.	A	Fort Worth	
8. Lacy, George W.	A	Fort Worth	Sept., 1945
9. Price, Sidney A.	A	Fort Worth	Sept., 1945
10. Stanford, Henry	A	Fort Worth[1]	Oct., 1945
11. Worden, Robert W.	A	Fort Worth	
Taylor-Jones Counties			
2. Adams, Clinton E.	A	Abilene	
3. Bridges, James P.	A	Abilene[2]	
4. Hodges, Frank C.	A	Abilene	Dec., 1945
5. Seale, Hubert	A	Abilene	Oct., 1945
Titus County			
1. Taylor, William A.	A	Mount Pleasant	Sept., 1945
Travis County			
2. Dildy, Charles B.	A	Austin	Aug., 1945
3. Kelly, Alfred J.	A	Austin	
4. White, Bennie O.	A	Austin	Nov., 1945
Webb-Zapata-Jim Hogg Counties			
2. Carrithers, Clem M.	A	Bruni	
3. Griffin, Olin A., Jr.	A	Randado	
Wichita County			
2. Daily, R. L.	A	Wichita Falls	Oct., 1945
3. King, Thomas C.	A	Electra	
4. McFatridge, Keith W.	A	Wyandotte, Mich.[3]	
5. Parmley, Van S.	A	Electra	
6. Patillo, Albert D., Jr.	A	Wichita Falls	Sept., 1945
7. Smith, M. Zenos	A	Wichita Falls	
Williamson County			
1. Rice, Albert J.	A	Georgetown[4]	
2. Wheeler, Howard P.	A	Georgetown	Jan., 1946
Wood County			
1. Wheeler, Frank B.	A	Winnsboro	

[1]Formerly of Dallas.
[2]Formerly of Anadarko, Okla.
[3]Formerly of Port Neches.
[4]Formerly of Yoakum.

[1]Formerly of Temple.
[2]Formerly of New York, N. Y.
[3]Formerly of Wichita Falls.
[4]Formerly of Austin.

DEATHS FROM DIPHTHERIA UNNECESSARY

The deaths of approximately 1,000 American children annually from diphtheria are unnecessary and could be prevented by early administration of antitoxin in adequate doses, according to the November 10 issue of *The Journal of the American Medical Association.*

"The available methods for control of diphtheria are sufficient to allow the complete elimination of this disease in the United States," *The Journal* said editorially. "The application of modern immunization methods of susceptible persons on a countrywide basis would serve to eradicate the disease."

Commenting on the progress already made, *The Journal* said: "In 1943 the death rate from diphtheria at all ages fell below one per hundred thousand for the first time. At the same time the death rate in children under 10, in whom the disease is most frequent, has fallen below five per hundred thousand."

PENICILLIN TREATMENT OF SCARLET FEVER

The successful seven-day treatment of scarlet fever patients, by the injection of 10,000 units of penicillin into the muscles every three hours, is reported by Manson Meads, M. D., M. Eugene Flipse, Jr., M. D., Mildred W. Barnes, and Maxwell Finland, M. D., with the collaboration of Ruth Drew and Alice Northrop, Boston, in *The Journal of the American Medical Association* of November 17. The report reveals that this treatment is effective in rapidly eliminating hemolytic streptococci from the nose and throat within forty-eight hours.

MISCELLANEOUS

COMING MEETINGS AND CLINICS

State Medical Association of Texas. Dr. H. F. Connally, Waco, President; Dr. Holman Taylor, 1404 W. El Paso St., Fort Worth, Secretary.

American Medical Association (House of Delegates), Chicago, December 3-6. Dr. Herman L. Kretschmer, Chicago, President; Dr. Olin West, 535 North Dearborn Street, Chicago, Secretary .

Southern Medical Association. Dr. M. Y. Dabney, Birmingham, Ala., President; C. P. Loranz, Empire Building, Birmingham, Ala., Secretary-Manager.

Southwest Allergy Forum, Houston, April, 1946. Dr. George W. Owen, Jackson, Miss., Temporary President; Dr. A. H. Braden, 1910 Crawford St., Houston, Secretary.

Texas Association of Medical Anesthetists. Dr. E. D. Embree, Houston, President; Dr. R. A. Miller, 1415 Nix Professional Building, San Antonio, Secretary.

Texas Association of Obstetricians and Gynecologists, Galveston. Dr. Allen McMurrey, Houston, President; Dr. Julius McIver, 714 Medical Arts Building, Dallas, Secretary.

Texas Chapter American College of Chest Physicians. Dr. S. E. Thompson, Kerrville, President; Dr. Elliott Mendenhall, Dallas, Secretary.

Texas Club of Internists. Dr. Robert M. Barton, Dallas, President; Dr. Julian C. Barton, 414 Navarro St., San Antonio, Secretary.

Texas Dermatological Society. Dr. Lewis Pipkin, San Antonio, President; Dr. Duncan O. Poth, 1230 Nix Professional Building, San Antonio, Secretary.

Texas Hospital Association, Fort Worth, March 21-23, 1946. Lawrence Payne, Baylor Hospital, Dallas, President; Miss Madelyne Sturdavant, 5709 Velasco, Dallas, Secretary.

Texas Neuropsychiatric Association. Dr. Titus Harris, Galveston, President; Dr. Fred Rogers, Dallas, Secretary.

Texas Ophthalmological and Otolaryngological Society, San Antonio, December 14-15. Dr. M. K. McCullough, Dallas, President; Dr. E. D. Dumas, San Antonio, Secretary.

Texas Orthopedic Society. Dr. E. A. Cayo, San Antonio, President; Dr. Edward Smith, Houston, Secretary.

Texas Pediatric Society. Dr. Frank H. Lancaster, Houston, President; Dr. John Ashby, Dallas, Secretary.

Texas Public Health Association. Major Lewis Dodson, C. E., Headquarters Eighth Service Command, Dallas 2, Texas, President.

Texas Radiological Society. Dr. T. B. Bond, Fort Worth, President; Dr. R. P. O'Bannon, 650 Fifth Ave., Fort Worth, Secretary.

Texas Railway and Traumatic Surgical Association. Dr. W. B. Reeves, Greenville, President; Dr. Ross Trigg, First National Bank Building, Fort Worth, Secretary.

Texas Society for Mental Hygiene. Dr. Paul L. Boynton, S. F. A. S. T. C., Nacogdoches, President; Miss Jennie S. Wilmot, University of Texas, Austin, Secretary.

Texas Society of Gastro-enterologists and Proctologists. Dr. James J. Gorman, El Paso, President; Dr. George M. Underwood, 4105 Live Oak Street, Dallas, Secretary.

Texas Society of Pathologists, Dallas, Jan. 27, 1946. Dr. Paul Brindley, Galveston, President; Dr. John J. Andujar, 1300 W. Cannon Ave., Fort Worth, Secretary.

Texas State Heart Association. Dr. Victor E. Schulze, San Angelo, President; Dr. Walter B. Whiting, Wichita Falls, Secretary.

Texas Surgical Society, Temple, April 1-2, 1946. Dr. G. V. Brindley, Temple, President; Dr. Walter Stuck, 1426 Nix Professional Building, San Antonio, Secretary.

Texas Tuberculosis Association. Dr. J. B. White, Amarillo, President; Miss Pansy Nichols, Austin, Executive Secretary.

Third, Panhandle, District Medical Society. Dr. D. D. Cross, Lubbock, President; Dr. George Powers, Amarillo, Acting Secretary.

Fourth District Medical Society, Brady, November, 1946. Dr. H. L. Locker, Brownwood, President; Dr. Glenn H. Ricks, Brady, Secretary.

Fifth and Sixth, Southwest District Society. Dr. Phil A. Bleakney, Harlingen, President; Dr. C. W. Tennison, San Antonio, Secretary.

Seventh, Austin District Society. Dr. Robert B. Morrison, Austin, President; Dr. M. I. Brown, Austin, Secretary.

Eighth, Ninth and Tenth Districts Medical Society. Dr. J. T. Tadlock, Dayton, President; Dr. George W. Waldron, Medical Arts Building, Houston, Secretary.

Eleventh District Society, Jacksonville, March, 1946. Dr. C. B. Young, Tyler, President; Dr. J. M. Travis, Jacksonville, Secretary.

Twelfth, Central Texas, District Society, Waco, January 8, 1946. Dr. R. K. Harlan, Temple, President; Dr. Robert J. Hanks, Waco, Secretary.

Thirteenth, Northwest, District Society. Dr. A. L. Roberts, Fort Worth, President; Dr. Joe R. Wise, 1212 W. Lancaster, Fort Worth, Secretary.

Fourteenth District Society, Dallas, December 11. Dr. W. C. Morrow, Greenville, President; Dr. A. L. Ridings, Sherman, Secretary.

Fifteenth, Northeast Texas, District Society, October, 1946. Dr. Frank Littlejohn, Marshall, President; Dr. Henry H. Niehuss, Greggton, Secretary.

CLINICS

Dallas Southern Clinical Society, Dallas, March 18-21, 1946. Secretary, 433 Medical Arts Building, Dallas 1.

HOSPITALS NEEDING INTERNS AND RESIDENTS

Methodist Hospital, Dallas. Capacity 206 beds. C. W. Sensenbach, M. D., Medical Director; (4 interns now).

Nix Hospital, San Antonio. Capacity 145; admissions 5,564. Ellen Louise Brient, R. N., Superintendent (1 intern).

TEXAS ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS MEETING

Texas Association of Obstetricians and Gynecologists met at the Gunter Hotel in San Antonio on November 17. The following scientific program was carried out:

Discussion by San Antonio physicians.
Retrodisplacement of Uterus with the Exhaustive Syndrome, Dystic Ovaries, or Endometriosis.
Management of Nausea and Vomiting of Pregnancy.
An Ideal Analgesia.
The Irritable Uterus and Threatened Premature Labor.
Prevention of Late Toxemia of Pregnancy.
Elderly Primapara: Caesarian or Spontaneous Delivery.
New Aids in Diagnosis of Cancer of the Breast—Dudley Jackson and A. O. Severance.
Management of the Third Stage of Labor—Truman Morris, Austin.
The Cerebral Vascular Complications of Pregnancy—William C. Ellers, Southwestern Medical College and Parkland Hospital, Dallas.
C. R. Hannah Memorial Lecture: The Clinical Diagnosis of Varying Degrees of Bandl's Ring—Herman Johnson, Houston.
Hysterosalpingography As An Aid to Gynecologic Diagnosis—Albert W. Holman, Portland, Oregon.
Memories of Dr. C. R. Hannah—J. W. Bourland, Sr., Dallas.
J. F. Y. Paine Address: The Rh Factor in Pregnancy and in Isohemolitic Disease—R. J. Pieri, Syracuse University Medical School, Syracuse, N. Y.

President Allen T. Stewart, Lubbock, gave an address, "Obstetrics in the Post War Years," at dinner, at which time Dr. Pieri gave a second paper, "The Direct Supravesical Extraperitoneal Caesarian Section."

During a business session the Association decided to meet next at Galveston, the date to be set at the midsummer council meeting. Dr. Allen McMurrey, Houston, was installed as president; Dr. Joseph E. Kanatser, Wichita Falls, was made president-elect; Dr. Warren E. Massey, Dallas, was elected vice-president; and Dr. Julius McIver, Dallas, was re-elected secretary-treasurer. Dr. J. N. Burditt, Abilene, was re-elected to the executive council for a three-year term. Dr. Stewart, as immediate past president, succeeded Dr. Minnie L. Maffett, Dallas, on the executive council.

The Association voted to write each Congressman and Senator from Texas, expressing its opposition to the Wagner-Murray-Dingell bills and the Pepper bill and endorsing the Hill-Burton hospital bill.

Thanks of the Association were extended to Dr. W. W. Maxwell and Dr. Ben Hill Passmore, both of San Antonio, for their services in arranging for the meeting.

MALARIA FAKES SYPHILIS REACTIONS

In a study of 100 nonsyphilitic white male patients with vivax malaria, a mild form, two Army Medical Corps men reported that 33 cases showed a positive reaction to a blood test for syphilis. There were 11 doubtful and 56 negative reactions.

Writing in the November 10 issue of *The Journal of the American Medical Association*, Major Harry M. Robinson, Jr., and Major William W. McKinney

said that thereafter "weekly examinations of the blood were done on all patients with a reported positive or doubtful Kahn reaction until a negative reaction was obtained."

The results were: "83.8 per cent of those with positive reactions had negative reactions at the end of four weeks. Seventy per cent of those with doubtful reactions had negative reactions at the end of four weeks." In all cases the serum reaction for syphilis was negative at the end of eleven weeks.

The authors pointed out that "various investigators have reported on the incidence of false positive reactions in the blood of malarial patients." Three investigators, the authors wrote, "working with inoculated malaria in nonsyphilitic patients, found that all cases gave a false positive serologic test for syphilis at some time during the fever therapy."

TEXAS CLUB OF INTERNISTS

Texas Club of Internists met at the University of Texas School of Medicine in Galveston October 26-27. The following scientific program was carried out, all papers being presented by members of the staff of the University of Texas School of Medicine:

OCTOBER 26

Effect of Variation in Intake of Protein, Carbohydrate, and Fat on Resistance to Infection—Wallace Sako.
Changes in the Mechanism of Experimental Renal Hypertension During Its Course—Eric Ogden.
Clinical and Experimental Hypertension—Raymond Gregory and William Levin.
Surgical Conditions of the Lung—A. O. Singleton.
Experiences in Treatment of Syphilis with Penicillin—Chester N. Frazier.
Contribution from Department of Neurology and Psychiatry.
The Reversible and Irreversible Changes in the Liver with the Effects of Choline Chloride—George Herrmann.
Impairment of Liver Function in Congestive Failure—Joseph Kopecky.
Incidence of Electrocardiographic Changes in Acute Rheumatic Fever—Frank McKinley, Jr.

OCTOBER 27

Clinical Pathological Conference—Paul Brindley and staff.
Surgical Condition of the Lung—A. O. Singleton.
Functional Diastolic Murmurs—Owen W. Beard.
The Measurement of Circulation Time—Arthur Ruskin.
Incidence of Hypertension in Diabetes—E. J. Lefeber.

Dr. Chauncey D. Leake, vice-president and dean of the University of Texas School of Medicine, was speaker at a luncheon at the Hotel Galvez, October 26. A cocktail party and dinner were also held at the hotel.

Dr. Robert M. Barton, Dallas, will continue to serve the club as president until elections at the spring meeting in Dallas, with Dr. William B. Marr, Galveston, as vice-president, and Dr. Julian C. Barton, San Antonio, as secretary-treasurer.

BAKER HOTEL, MINERAL WELLS, APPROVED

Approval of the Baker Hotel, Mineral Wells, by the Committee on American Health Resorts of the American Medical Association is announced in the October 6 number of *The Journal of the American Medical Association.* Basing its opinion on information required under its rules, including copies of advertising and promotional material and a report on an inspection by a Committee representative, the Committee agreed to place the Baker Hotel on the list of American Health Resorts complying with the Committee rules, for a period of one year beginning September 1, 1945. This listing may be continued for three-year periods if the listed institution continues to comply with the rules.

PUBLICITY FOR SCIENTIFIC MEDICINE

"Publicity for new discoveries in the field of medicine is a two edged sword," the October 27 issue of *The Journal of the American Medical Association* says editorially. "It may extend the hopes of the public far beyond what is warranted. It may cause pressure on physicians to try methods of treatment that may not be desirable. On the other hand, the public is certainly entitled to know about new discoveries in medicine and their significance in relation to the maintenance of health and the prevention of disease. Recently the periodical *Nordisk Medicin* has developed a special technic in relation to the scientific medical articles that it publishes with a view to solving this problem. When an article is undesirable or unready for public exploitation, the editors place at the top of the article as published in the medical journal the phrase 'Omtale i dagspressen forbydes.' This means that reproduction in the daily press is forbidden. Since the material in the publication is covered by controls, as our periodicals are covered by copyright law, this would seem to serve the purpose of delaying publicity for scientific contributions until the medical profession itself considers such publicity warranted."

VAN METER PRIZE AWARD

The American Association for the Study of Goiter again offers the Van Meter Prize Award of $300 and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The award will be made at the annual meeting of the Association which will be held in Chicago in April or May, 1946, providing essays of sufficient merit are presented in competition.

The competing essays may cover either clinical or research investigations; should not exceed three thousand words in length; must be presented in English; and a typewritten double spaced copy must be sent to the corresponding secretary, Dr. T. C. Davison, 207 Doctors Building, Atlanta 3, Ga., not later than February 20, 1946.

A place will be reserved on the program of the annual meeting for presentation of the prize award essay by the author if it is possible for him to attend. The essay will be published in the annual proceedings of the Association. This will not prevent its further publication, however, in any Journal selected by the author.

LIBRARY NOTES

The package library consists of collections of reprints and other periodical material on various subjects, prepared for lending to members of the Association. Requests for packages should be addressed "Library, State Medical Association of Texas, 1404 W. El Paso Street, Fort Worth 3, Texas." Twenty-five cents in stamps should be enclosed with the request to cover postage and part of the expense of collecting the material. Only one package may be borrowed at a time, and packages are allowed to remain in the hands of the borrower for 14 days.

PACKAGE SERVICE

Packages were mailed from the Library of the State Medical Association to the following during November:

Dr. Robert C. Miller, Lake Jackson—*Skin Grafts* (6 articles).

Dr. J. H. Stiles, Lubbock—*Spine, intervertebral disc* (13 articles).

Dr. G. W. Sansom, George West—*Color Blindness* (16 articles).

Library, University of Texas, Galveston—(2 journals).

Dr. Howard Dudgeon, Jr., Waco—*Old Age, surgery* (20 articles).

Veterans Administration Hospital, Amarillo—*Public Health, administration and organization* (10 articles).

Dr. T. E. Dodd, Austin—*Penicillin, therapy* (8 articles).

Dr. Thomas E. Cook, Dallas—*Breast, cancer* (11 articles).
Dr. Simon Rodriguez, Del Rio—*Hospital Floor Plans* (4 articles).
Dr. F. R. Rugeley, Wharton—(1 journal).
Dr. M. E. Jacobson, Amarillo—*Venereal Diseases* (14 articles).
West Texas State College, Canyon—*Medicine, socialized* (17 articles).
Dr. O. W. Little, Abilene—(2 journals).
Dr. M. J. McSween, Jr., Slaton—(1 journal).
Dr. E. E. Miller, Beeville—*Arthritis, therapy* (21 articles).
Dr. G. H. Hampshire, Marlin—*Cataract* (16 articles).
Dr. J. R. Coen, Littlefield—*Thiourea* (16 articles).
Dr. Bernard B. Friedman, Corpus Christi—(1 journal).
Dr. W. P. Morgan, Austin—*Metabolism* (4 articles).
Southwestern Medical College, Dallas—(1 journal).

ACCESSIONS

Chicago, American Medical Association—Reports of the Council on Pharmacy and Chemistry; New and Nonofficial Remedies.

SUMMARY

REPRINTS RECEIVED, 1,189.	LOCAL USERS, 78.
JOURNALS RECEIVED, 182.	BORROWERS BY MAIL, 20.
ITEMS CONSULTED, 352.	PACKAGES MAILED, 20.
ITEMS TAKEN OUT, 246.	ITEMS MAILED, 124.

TOTAL ITEMS CONSULTED AND LOANED, 713.

MOTION PICTURE LENDING LIBRARY

Motion picture films on medical subjects, 16 mm., both silent and sound, some in color, and suitable for either medical or lay audiences, are available for loan to county medical societies, hospital staffs, or individual physicians, on request. Borrowers will be required to pay only the cost of shipment of the films, by express, with insurance, and for any damage to films while in the hands of the borrower.

Requests for films should be addressed to "Motion Picture Lending Library, State Medical Association of Texas, 1404 West El Paso Street, Fort Worth 3, Texas." A list of available films, with descriptions, will be furnished on request.

The following motion picture films were loaned by the Motion Picture Lending Library of the State Medical Association during November:

Antitoxins, Globulin Modified (Available through the courtesy of Lederle Laboratories, Inc.)—Harris School of Nursing, Fort Worth.

Back to Normal (Available through the courtesy of British Information Services)—Business & Professional Women's Club, Brownsville, and City-County Hospital, Fort Worth.

Blood Transfusion (Available through the courtesy of British Information Services)—Harris School of Nursing, Fort Worth, and City-County Hospital, Fort Worth.

Blood Transfusion, the Technique of (Available through the courtesy of Mead Johnson & Company)—Premedical Club, Lamar College, Beaumont, and premedical and nursing groups, Lamar College, Beaumont.

Bleeding Tendency (Available through the courtesy of Mead Johnson & Company)—Premedical and nursing groups, Lamar College, Beaumont, and Premedical Club, Lamar College, Beaumont.

Choose to Live (Available through the courtesy of U. S. Public Health Service and the American Society for the Control of Cancer)—Business & Professional Women's Club, Brownsville, and Nurse's Aides, Fort Worth.

Cloud in the Sky (Available through the courtesy of Texas Tuberculosis Association)—Harris School of Nursing, Fort Worth.

Eyes for Tomorrow (Available through the courtesy of the Hurst Eye, Ear and Throat Hospital-Clinic, Longview)—Rotary Club and Boosters Club, Denison, and Business and Professional Women's Club, Cleburne.

Immunization (Available through the courtesy of Lederle Laboratories Inc.)—Department of Public Health and Welfare, Fort Worth, and Texas State Welfare Association, Fort Worth.

Lease on Life (Available through the courtesy of the Texas Tuberculosis Association)—Harris School of Nursing, Fort Worth.

Magic Bullets (Available through the courtesy of the U. S. Public Health Service)—Business & Professional Women's Club, Brownsville.

Middletown Goes to War (Available through the courtesy of the Texas Tuberculosis Association)—Harris School of Nursing, Fort Worth.

Nasal Sinusitis (Available through the courtesy of E. Fougera and Company, New York)—Galveston County Medical Society, Galveston.

Role of the Public Health Nurse in Tuberculosis (Available through the courtesy of Texas Tuberculosis Association)—Harris School of Nursing, Fort Worth.

Sutures Since Lister (Available through the courtesy of Johnson & Johnson)—Premedical Club, Lamar College, Beaumont.

Tuberculosis, Diagnostic Procedure in (Available through the courtesy of Texas Tuberculosis Association)—Harris School of Nursing, Fort Worth.

NEWS

Contributions to this department will be appreciated. News should be of general medical interest, such as public health activities, new hospitals, personal items of more than local value, etc. News for a particular number of the JOURNAL should be in the hands of the Editor not later than the fifteenth of the preceding month.

Four Hospitals Chartered.—Charters have been granted for hospitals at Leonard, Dimmit, Wolfe City, and Crosbyton under the coöperative hospital act passed by the last legislature, according to the Fort Worth *Star-Telegram*. Under terms of the act, sponsored by Senator George Moffett, of Chillicothe, coöperative hospitals are authorized to hold charters as charitable institutions in cities or towns of fewer than 2,500 inhabitants. The bill was introduced as an inducement to physicians to locate in small communities, which have had difficulty in securing adequate medical service. It is reported that additional hospitals are being organized in line with the act.

Wolfe City Hospital.—A hospital large enough to serve the needs of families in Hunt, Fannin, and adjoining counties is being planned for Wolfe City, the Commerce *Journal* informs. Already chartered under the coöperative hospital act of Texas, the new hospital is being sponsored by the Wolfe City Luncheon Club. Dr. T. M. McDonald, chairman; Paul M. Fulks, Dr. J. C. Cheatham, R. L. Mullins, M. E. Dooley, Grover Little, and Dr. S. B. Cooper are on the board of directors for the hospital. Dr. McDonald says that an effort will be made to enroll six hundred families as members of the hospital, within a radius of fifty miles. A lifetime membership will cost $50 and annual fees will be based on the size of the family.

Health Survey by Women's Clubs.—A health survey of counties in Texas was proposed to the Texas Federation of Women's Clubs board at its meeting in Austin November 9, by Mrs. J. W. Hampton, of San Antonio, chairman of the public health committee. The survey idea was presented at a public health forum prior to the board meeting, with Dr. George W. Cox, state health officer; Dr. Ed Taylor, director of dental health in the State Health Department; and Mrs. Hampton as speakers. According to the plan,

each district health chairman of the federation would be responsible for ascertaining how many persons in each county died of heart disease, cancer, communicable diseases, and tuberculosis. Results of the survey, when tabulated, would be presented at a statewide public health institute, would be given general publicity, and would serve as a basis for planning better health legislation.—*Dallas News.*

A City Physician for Corpus Christi was agreed upon recently by the City Council, the Corpus Christi *Caller-Times* states. Dr. Dan H. Clark, recently released after four and a half years with the Army, has been named to the position. The office was established when an ordinance was passed to have all food handler permits issued by a full time municipal doctor. Previously food handlers could secure certificates from a physician of their choice, and the Council was told that diseased persons were being furnished certificates without examination and that abnormally high rates were being charged for the certificates. The Council decided to have a city physician issue all such certificates, and only following a complete physical examination, at a flat rate of $1.50. The health ordinance was passed upon recommendation of the Nueces County Medical Society and the City-County Health Unit.

Mobile X-Ray Unit at Gatesville.—The State Mobile X-Ray Unit was in Gatesville November 19 for the second time, the Gatesville *Messenger* reports. Histories were made on tuberculosis patients, their contacts, and on persons who reacted positively to tuberculin tests, which were offered to the public. The unit was brought to Coryell County at the request of the county medical society.

Diplomates, National Board of Medical Examiners will be accepted for reciprocal licensure in Texas, at the discretion of the Texas State Board of Medical Examiners, as a result of action taken by the Texas Board October 14, at a meeting in Dallas; the Board voted unanimously on the matter. One diplomate of the National Board was granted a license on reciprocal endorsement at the meeting referred to.

Venereal Disease in Bexar County will be vigorously combated in a program sponsored by the Bexar County Medical Society, according to the San Antonio *News.* An intensive case finding and educational program in an effort to take 80,000 volunteer blood tests for syphilis will be pushed during February, Dr. H. M. Bush, president of the Society declares. Unanimous action was taken by the Society following presentation of the proposed program by Dr. J. Manning Venable, chairman of the Society's venereal disease committee, and Dr. Walter S. Green, chief of the venereal disease division of the city health department.

Approximately $5,000 worth of pamphlets, film, and other educational material will be used in the campaign, with the educational phase scheduled to begin January 14. State and local funds up to $4,000 will be used, and the American Social Hygiene Association will donate $1,000 in literature. Also cooperating in the program are the Junior Chamber of Commerce, Council of Churches, Catholic Welfare Association, City Health Department, Office of Social Protection, Provost Marshal, Community Welfare Council, City Council of Parent-Teachers Association, Army venereal disease officers, and Police Department.

In emphasizing the need for such a campaign, Dr. Venable said that Texas Selective Service boards have found one in ten selectees to have syphilis, and that other figures show the venereal disease rate to be increasing among Army personnel.

Journal Club, of Waco, an organization of physicians to help them keep abreast of news and comment in current medical journals, has been reorganized, reports the Waco *Tribune-Herald.* The club. for which members synopsize journal articles at each monthly meeting, was disbanded during the war, but will now resume meetings the first Wednesday evening of each month.

Denton Crippled Children's Clinic.—An examining clinic for crippled children was held in Denton November 16 under sponsorship of the Denton Kiwanis Club, the Denton *Chronicle* advises, with orthopedic physicians and surgeons from Dallas and Fort Worth participating. Dr. Charles F. Clayton, of Fort Worth, and Dr. Sim Driver, Dr. Ruth Jackson, Dr. Ben L. Schoolfield, and Dr. Paul C. Williams, of Dallas, were invited. Also present was Martin Ricker, executive secretary of the Texas Society for Crippled Children. The clinic was held to locate children eligible for treatment through the federal and state grants to the crippled children's division of the State Department of Health, which conducted the clinic.

Hospital at Columbus.—A clinic and enlarged hospital has been established in Columbus by Dr. C. I. Shult and Dr. J. H. Wooten, Jr., the Columbus *Citizen* reports. The hospital will be operated on an open staff basis, making its facilities available to all qualified doctors.

San Antonio Health.—Dr. P. I. Nixon has been made chairman of the San Antonio health board, succeeding Reagan Houston, the San Antonio *News* reports. Houston will remain on the board, which voted him special thanks for his guidance during the past two years. The board authorized employment of a tuberculosis expert as full-time clinic physician at the county hospital, part of his salary to come from federal money through the State Health Department and part from the Bexar County Tuberculosis Association. Dr. Lewis C. Robbins, city health officer, announced that in line with a clean-up campaign aimed at curbing the rising infant diarrhea, typhus, and polio rate in San Antonio, charges of violation of a city ordinance requiring proper coverage of garbage cans have been filed against some San Antonio residents.

DDT Used at Stratford.—Every public building and every private residence in Stratford, Texas, has been sprayed with a solution of DDT insecticide in what its citizens believe to be one of the first such campaigns in America. Following the recent death from polio of one of the outstanding high school athletes of Stratford, the townspeople decided to attempt to prevent further disease. Upon the recommendation of a state sewerage inspector, city officials secured the DDT, and within one afternoon all the public buildings and private residences in the city had been coated with the solution, through a volunteer effort and by hand.

Tumor Seminar.—San Antonio and Brooke General Hospital pathologists were hosts at a tumor seminar October 6, conducted by Dr. Arthur P. Stout, professor of pathology at Columbia University, at the Medical and Surgical Hospital in San Antonio. Twenty-five different tumors were submitted for study by the forty pathologists present, with slides and a mimeographed copy of the history of each case being furnished to each participant. Lunch was served the group through courtesy of the hospital, and a dinner was held at the Cos House in La Villita.

The tumor seminar, which the pathologists of San Antonio hope to make an annual affair, is the result of three years of fortnightly meetings at which local pathologists have pooled their material and used it for group study. A meeting conducted by Dr. Arthur P. Stout for the Texas Society of Pathologists in May, 1944, proved so successful that plans were immediately made for the seminar in October, 1945, to which pathologists from over the state were invited. Arrangements were under the direction of Dr. B. F. Stout, of San Antonio.

Fort Worth Eye, Ear, Nose and Throat Society met September 23 at an informal dinner at the Worth Hotel with Dr. and Mrs. Efren Marin, of Mexico City, as special guests, according to the Tarrant County Medical Society *Bulletin*. Dr. Marin had been in attendance at a meeting of the Scientific Society of Doctors of the French Language in North America at Quebec, where he read a paper on "Cysts of the Ear in Children." He and Mrs. Marin were en route to Mexico City, where he is head of the ear, nose, and throat department of Hospital Infantile. While in Fort Worth he conducted an operative clinic at the City-County Hospital and showed films of a new technic he has developed for removing tonsils. Dr. John J. Andujar of Fort Worth, acted as interpreter.

Society for Experimental Biology and Medicine.—Seventy members of the Southwestern Section of the Society for Experimental Biology and Medicine met in Dallas October 20 with Dr. Donald Slaughter, dean of students of the Southwestern Medical College and chairman of the Southwestern Section of the organization, presiding. Scientific programs devoted to general biochemistry, physiology and pharmacology, and general biology were held, and a luncheon and smoker were included in the activities. The organization approved a resolution warning against governmental interference with freedom of science and another deploring legislative interference with freedom of research involving animals.

Texas Eclectic Medical Association held its annual meeting in Dallas in October, electing Dr. C. W. Williams, of Abilene, president, to succeed Dr. W. C. Morrow, of Greenville. The convention, which was the first held by the Association in three years because of wartime restrictions, was the sixty-first annual meeting of the organization.

Ophthalmo - Otolaryngological Conference.—Members of the San Antonio Ophthalmo-Otolaryngological Society and members of the medical staff at the Army Air Forces School of Aviation Medicine, Randolph Field, held a conference November 13 on methods of combating eye, ear, nose, and throat diseases.

Members of the teaching staff at the school discussed the utilization of new drugs in the prevention and control of ophthalmo-otolaryngological diseases, displaying medical photographs and art work pertaining to such diseases. Major Hubert B. Peugnet, St. Louis, demonstrated a new magnetic wire recorder used in research studies in the A. A. F. School's Department of Otolaryngology. Brig. Gen. Eugen G. Reinartz, Commandant of the School, welcomed the Society following a reception and dinner at the Randolph Field Officers Club. Lt. Col. Brittain F. Payne, New York City, and Capt. Fred W. Ogden, New Orleans, assisted Dr. Virgil S. Steele and Dr. Dan Russell, San Antonio, in organizing the program.

Charter for Texas Medical Center.—Approval of a corporation charter for the Texas Medical Center at Houston, a non-profit benevolent society, has been announced by the charter division of the Secretary of State's office in Austin, the Austin *American-Statesman* advises. Primary purpose of the organization is "to promote and provide for or assist in the establishment, support, and maintenance of facilities for medical, dental, and nursing education and other phases of health and medical education for hospitalization, treatment of the sick, and research." Incorporators were James Anderson, Hines H. Baker, William B. Bates, John H. Freeman, Clinton S. Quin, and H. M. Wilkins.

Houston Health Center.—A health center, probably in a neighborhood district where many health hazards exist, has been approved by the Houston Board of Health, according to the Houston *Press*. The center will be built with $100,000 from the $550,000 health center bonds voted in 1944, which will be available during 1946, Dr. Austin E. Hill, city health director, declares. Previously Dr. Hill's preference had been to wait until 1947, when $200,000 would be available for a health center in the Civic Center. His recent recommendation, which was acted on promptly by the Board, means that the neighborhood center will be built before the Civic Center project is begun.

A representative of the U. S. Public Health Service from Atlanta praised Houston's health inspection service and promised that the city would get additional funds for fighting typhus next year.

The Board went on record against "extensions and exceptions" in the clean-up or close-up ordinance affecting every eating place in Houston. Passed nearly a year ago, the ordinance becomes effective December 1.

Southwestern Medical College.—The campaign by Southwestern Medical College to raise $1,300,000 for an operating fund for the next five years has been reported as making excellent progress by Dallas newspapers. With George L. MacGregor and J. B. Adoue, Jr., serving as co-chairmen of the drive, Dr. Chauncey D. Leake, vice-president and dean of the University of Texas School of Medicine, was brought to Dallas to speak at the "kick-off" meeting of the Business Team October 18, and Dr. Tinsley R. Harrison, dean of Southwestern Medical College, spoke before the Residential Team, which is composed entirely of women under the leadership of Mrs. J. C. Vanderwoude and Mrs. Edwy R. Brown. Early reports of some of the teams indicated that their quotas had already been reached and passed.

Patrons of the State Theater in Amarillo were given an opportunity to contribute towards the Southwestern Medical Foundation fund for research on rheumatic fever by attending a double feature program either of two successive days in October, according to the Amarillo *Globe*. The theater is one of the chain of Interstate Theaters, of which Karl Hoblitzelle, of Dallas, is president. Mr. Hoblitzelle is one of the leaders in the drive for operating funds of Southwestern Medical College.

University of Texas School of Medicine.—The Board of Regents of the University of Texas created a new position, that of medical director of hospitals for the School of Medicine, and appointed Dr. B. I. Burns, former dean of Louisiana State University Medical School, to the position at its regular October meeting, reports the Austin *American-Statesman*. Dr. Burns, recently resigned from L. S. U., along with twenty-two others, because of friction in administrative procedure there, will be directly responsible to the vice-president of the Medical Branch, Dr. Chauncey D. Leake, to the President, and to the Board of Regents. His duties, as adopted by the Board, will include full authority to employ and discharge any employee of the hospitals; control and approval of the admission of patients, both pay and charity; formulation of the rules and regulations governing the admission of patients; direct control over the graduate and student nurses while on duty; and full responsibility of all properties and approval of the purchase of all supplies. In addition, he will have "general powers as recognized by hospitals of the first class." Dr. Burns, who was engaged by the Regents to make an investigation of conditions at the Galveston hospitals last summer, will assume his new duties about December 1.

Plans are under way for the proposed cancer research on women patients of Texas eleemosynary institutions by the University of Texas School of Medicine, the Galveston *Tribune* indicates. The research, recently approved by the State Board of Control, will be under the direction of Dr. John W. Weaver, assistant professor of obstetrics and gynecology, who will set up headquarters in Austin. Dr. Willard R.

Cooke, professor of obstetrics, will outline procedures for Dr. Weaver to follow. Dr. Paul Brindley, professor of pathology, will act as consultant for the cancer-tumor diagnostic and research work. Dr. Charles E. Lankford, assistant professor of obstetrics and gynecology, will conduct bacterial research through the department in Galveston. Routine work in diagnostics will be handled by the laboratory of the Texas State Department of Health in Austin, of which Dr. S. W. Bohls is director. It was emphasized by Dr. Leake that the research program still must be approved by other agencies before it can be put into effect.

Dr. Leake has declared that filling of the east end flats is a necessary step in the postwar development of Galveston, according to the Galveston *News*. He listed the following arguments in favor of filling the flats: (1) elimination of a health hazard caused by rat-infested, fly-contaminated, and mosquito-breeding dumps and lowlands; (2) provision for expansion of John Sealy Hospital on the flats owned by the Sealy-Smith Foundation; (3) opportunity for a medium income housing project, needed to relieve the acute housing shortage; (4) increase in city income because of increased evaluation of filled properties and expected improvements thereon; (5) elimination of an ugly eyesore; and (6) effective community utilization of what is now merely waste land. Dr. Leake said that bonds to cover the cost of filling in the flats would eventually be paid off by increased taxes on the filled property, which would become more valuable because of the filling.

Dr. George Fahr, professor of medicine at the University of Minnesota School of Medicine, was guest speaker at the special conference on internal medicine held at the University of Texas Medical Branch November 1-3. He was retained as visiting professor in medicine throughout the remainder of November.

The Sugar Foundation, Inc. of New York City, has made a grant of $1,000 for the support of research work under the direction of Dr. W. A. Selle, professor of physiology, on the influence of carbohydrates on experimental liver cancer.

The John and Mary R. Markle Foundation has granted $7,000 to continue the support for two years of the study of filariasis under the direction of Dr. J. Allen Scott, associate professor of preventive medicine.

Regents of the University have completed arrangements with the Sealy Smith Foundation for the construction of a $250,000 addition to the Rebecca Sealy Nurses Residence at the Medical Branch.

Hogg Foundation for Mental Hygiene.—A course in applied mental hygiene under sponsorship of the Hogg Foundation for Mental Hygiene, the University of Houston, the University of Texas, the Bureau of Mental Hygiene, and the public schools was begun in Houston in November with meetings to be held each Tuesday evening for fifteen weeks, informs the Houston *Post*. College credit will be given by either the University of Houston or the University of Texas, and the course is also open to the general public. Among the speakers for the course are Dr. Daniel Prescott, professor of education, University of Chicago; Dr. Luther E. Woodward, consultant for the National Committee for Mental Hygiene; and Major S. H. Kraines, professor of psychiatry, University of Illinois.

Dr. Woodward, according to the Denton *Record*, spoke at North Texas State College November 10 under sponsorship of the Hogg Foundation and the National Committee for Mental Hygiene. His address was on emotional and vocational problems relative to postwar readjustments, with special emphasis on the problems of ex-servicemen.

Dr. Herbert Chamberlain, chief of the Division of Child Welfare Services of the California Department of Social Welfare, has been speaking on current mental problems before audiences in various parts of Texas under sponsorship of the Hogg Foundation. Appearances of the psychiatrist in El Paso, Galveston, and Texarkana are reported by the newspapers.

Military Personals

Lt. Col. Robert H. Mitchell, M. C., A. U. S., formerly a member of the Plainview Sanitarium staff, and at present chief of medicine in the 98th Evacuation Hospital at Yokohama, treated the former Japanese premier, Hideki Tojo, when he was recently brought to the hospital after attempted suicide, according to the Fort Worth *Star-Telegram*.

Capt. Raphael Conte, M. C., has been released from the Army after nearly four years in the service, two years of which were spent in the Aleutians. The Houston *Post* reports that Dr. Conte is resuming practice in Houston following a refresher course at Randolph Field. He wears the Pacific campaign ribbon and the bronze star.

Capt. Frederick G. Eidman and *Capt. Carl C. Carrico* have been released from duty at Harmon General Hospital, Longview, and are resuming practice in Houston, reports the Houston *Chronicle*. Captain Eidman served in the South Pacific and Captain Carrico in the Sicilian and Italian campaigns.

Dr. H. G. Cull, who saw military service in Alaska; *Dr. Everett R. Seale*, who served in Missouri and Florida, and *Dr. James Holliman*, who was in the European theater thirty-seven months, are now working on a part-time basis with the Houston Health Department, states the Houston *Chronicle*.

Major R. L. Daily has reopened his offices in Wichita Falls following discharge from the Army. He served thirty months in Africa, Italy, France, and Germany. Major Daily was awarded a bronze star and earned five battle stars.

Capt. T. A. Searcy, who entered service in the Army in 1942 and served twenty months in the European theater, has returned to civilian practice in Hearne, reports the Hearne *Democrat*.

Capt. J. Aubrey Cockrell has been released after five years in the Army and will resume practice in Houston, according to the Houston *Post*. Captain Cockrell's overseas service was in the Pacific.

Dr. Albert D. Pattillo, who wears the bronze star, two combat stars, and the Asiatic-Pacific and the American defense ribbons, is back from military duties and has been appointed assistant superintendent of the Wichita Falls State Hospital, where he was on the staff prior to joining the Army in 1941.—*Austin American*.

Dr. Mason R. Lyons, who served eighteen months in the Army Medical Corps, has begun the practice of medicine in Borger, the Borger *Herald* reports. Dr. Lyons formerly was located in Anadarko, Okla.

Brig. Gen. W. Lee Hart, who has been in charge of Army medical service in the Southwest for a decade, will retire in January to live in San Antonio, states the Dallas *News*. General Hart is the only service command medical director who has served one post throughout the war; he has been with the Eighth Service Command all that time, with offices in Dallas. He was eligible for retirement last year, but was kept on active service because of the shortage of physicians.

Major Frank C. Hodges, after completing three years of service in the Army, eighteen months of which was in Ireland and England, has returned to Abilene to resume his practice as orthopedic surgeon, informs the Abilene *Reporter-News*.

Lt. Col. R. H. Bell, back from four and a half years in the Army, has moved from Columbus to Palestine, the Columbus *Citizen* reports. Dr. Bell had practiced about ten years in Columbus prior to his military service.

Dr. Jabez Galt and *Dr. Dale Austin*, who served with the Army in Europe, are back at Southwestern

Medical College as graduate students and instructors, the Dallas *Times-Herald* notes. Both Dr. Galt and Dr. Austin were with the Baylor 56th Evacuation Hospital Unit.

Dr. E. P. McKinney is opening offices at Nacogdoches, following three and a half years as a flight surgeon in the Army Air Forces, reports the Nacogdoches *Herald.*

Major Reagan M. Marshall has been recently discharged from the Army Medical Corps after serving four and a half years, and will resume practice in Houston, the Houston *Chronicle* states. While in service, Dr. Marshall was made a fellow in the American College of Surgeons.

Dr. James P. Bridges, formerly a major in the Army Medical Corps, has been admitted to the American College of Surgeons, the Abilene *Reporter-News* advises. He is also a diplomate of the American Board of Urology.

Major Masters H. Moore has returned from duty in the Southwest Pacific to resume practice in Tyler, the Gladewater *Times-Tribune* states.

Dr. E. C. Williams and *Dr. Lewie Morgan,* both of whom have served in the Army Medical Corps, are back in Bonham to resume practice, the Bonham *Favorite* reports.

Major A. J. Magliolo has returned to practice in Dickinson after serving in the India-Burma theater, the Galveston *News* states.

Dr. R. N. Smith, Jr., has resumed the practice of medicine in Falfurrias following his recent discharge from the Navy Medical Corps, the Falfurrias *Facts* reports.

Capt. Robert F. Short, Dallas, has been released from the Navy, the Dallas *Times-Herald* reports. Captain Short was chief surgeon of unused Base Hospital 22, set up on Okinawa to care for casualties from the invasion of Japan. He was also stationed at Trinidad from June, 1942, until February, 1944.

Capt. and Mrs. J. P. Veit recently visited at Benavides, their former home, after an absence during which Captain Veit has served thirty-three months in the South Pacific with the Army Medical Corps, the Benavides *Facts* states.

Major Morris Goldberg, who in June, 1944, opened Riverside Hospital, the rapid treatment center for venereal diseases in Waco, under State Health Department auspices, has been transferred to the Manhattan Beach, N. Y., training station of the U. S. Coast Guard, according to the Waco *News-Tribune.*

Dr. John D. Dupre has returned to Levelland after three years in the Army Medical Corps, during part of which time he served in Europe. The Levelland *Herald* indicates that Dr. Dupre and *Dr. C. M. Phillips,* who is with the Army Medical Corps and was a recent visitor in Levelland, expect to resume operation of the Phillips-Dupre Hospital in Levelland as soon as possible. Both physicians are on terminal leave.

Lt. Commdr. H. Julian Frachtman has been released from active duty after five years with the Army Medical Corps, the Houston *Chronicle* states. Dr. Frachtman, who spent thirty-nine months in the Central Pacific and was awarded the bronze star and the meritorious service unit plaque, has reopened his offices in Houston.

Major D. E. Packard is reopening offices in Kerrville following discharge from the Army Medical Corps, states the Kerrville *Times.* Dr. Packard entered service five years ago and only recently returned from overseas duty in Germany and Austria, for which he wears the bronze star and two battle stars.

Major H. E. Lancaster will resume practice in Beeville following his recent discharge from the Army, the Beeville *Bee-Picayune* advises.

Lt. Col. Robert L. Cherry has recently been discharged from the U. S. Public Health Service, with which he served twenty-two months in North Africa, Sicily, and Italy, reports the San Antonio *News.* Dr. Cherry is chief of the communicable disease division of the San Antonio Health Department and assistant city health officer, succeeding *Dr. E. J. Arendt,* who has gone into private practice. Dr. Cherry was formerly director of the Harris County Health Unit.

Lt. Col. J. Griffin Heard is on terminal leave after more than four years with the Thirtieth Evacuation Hospital and is resuming the practice of surgery in Houston, informs the Houston *Post.* Dr. Heard was a member of the original mobile surgical hospital organized by the University of Texas School of Medicine early in 1941 and left for Pacific duty in September, 1943, as head of the surgical department. The hospital received a presidential unit citation for service in New Guinea and Dr. Heard was awarded the bronze star.

Dr. George Lacy, Fort Worth, has returned to practice following service in the Pacific as a physician with an engineer construction battalion, states the Fort Worth *Press.*

Major O. A. Manske has been discharged from the Army after being in service since June, 1942, reports the Holland *Progress.* Dr. Manske will resume the practice of pediatrics in Waco.

Dr. Hubert Seale, eye, ear, nose, and throat specialist, has returned to Abilene following discharge from the Army, with which he served in England and France, advises the Rotan *Advance.*

Major Arthur M. Faris has recently been released from the Army Medical Corps and has resumed practice of gynecology and obstetrics in Houston, the Houston *Post* reports. Dr. Faris entered service in May, 1942, and spent three years in Hawaii.

Dr. Jesse L. Coleman, former flight surgeon with the Army Air Forces, has been appointed to the staff of the Kerrville State Sanatorium, according to the Kerrville *Sun.*

Capt. Martin Schneider has returned to the staff of the University of Texas School of Medicine after serving with the Army Medical Corps, reports the Galveston *News.*

Commdr. Herschel E. Richardson, U. S. N., has just been promoted from the rank of lieutenant commander, the Georgetown *Sun* informs. Commander Richardson is assistant medical officer on the aircraft carrier Bon Homme Richard. He joined the Navy in 1939 and has served on the Bon Homme Richard since her commissioning in the fall of 1944, participating in the final offensive against the Japanese mainland. Commander Richardson's wife and daughter are with his parents in Georgetown.

Lt. James R. Martin is on terminal leave in Houston after twenty-seven months overseas with the Navy, according to the Houston *Chronicle.* He is resuming his practice as a dermatologist, interrupted when he joined the Navy in 1941.

Capt. M. Cohen, who has recently been discharged from the Army Medical Corps, will be associated as radiologist with *Dr. John Gleckler* in Denison, the Denison *Herald* states. At the time Dr. Cohen entered service he was practicing medicine at Marlin. He has since spent two and a half years in the Southwest Pacific.

Major W. S. Rhode has returned to Colorado, Texas, on terminal leave following service with the Army Medical Corps in Europe. Major Rhode's final separation from service will come January 5. His brother, *Major Oscar Rhode,* who also formerly practiced at Colorado, is at present with the 35th General Hospital in the Philippines.—*Colorado Record.*

Major Cooper Conner is back in Fort Worth after being discharged from the Army Air Force following fourteen months in Greenland, where the temperature was often 50 degrees below zero, the Fort Worth *Press* states.

Dr. Logan U. Mewhinney, Holland, is in St. Louis for a postgraduate course in pediatrics following discharge from the Armed Forces, the Holland *Progress* informs. Dr. Mewhinney had just finished a year's internship at Charity Hospital, New Orleans, when called into service.

Capt. Alfred R. Brin, M. C., A. U. S., Terrell, recently was awarded the certificate of merit for outstanding devotion to duty in caring for patients in Malmesbury, Wilts., England, from June, 1944, to June, 1945, resulting in outstanding accomplishments and substantial contributions to the professional field of urology. Captain Brin was graduated from the University of Texas School of Medicine in 1938, and entered service September 24, 1940.—*J. A. M. A.*

Capt. M. Zenos Smith, recently discharged from the Army Medical Corps, is resuming practice in Wichita Falls, according to the Wichita Falls *Record-News.* Dr. Smith was in service forty months, part of the time being spent with the Ninth Armored Division in France and Germany.

Dr. Landon R. McIntire, recently released from active duty with the Army in North Africa, Sicily, Italy, and at Fort Snelling, Minn., has joined the staff of the Malone and Hogan Clinic-Hospital in Big Spring, states the Big Spring *Herald.* Dr. McIntire is a native of Missouri and had previously practiced there.

Dr. Howard Y. Sigler, who practiced medicine in Hereford during the summer while on terminal leave from the Navy, has returned to that city to open offices, advises the Hereford *Brand.* Dr. Sigler attended Southern Methodist University but obtained his medical education at the University of Colorado, remaining in Colorado for his internship and additional surgical training before joining the Navy.

The Surgeon General has announced the promoton of *James Novack Crawford,* M. C., Greenville, and of *David Alfred Todd,* M. C., San Antonio, from the rank of major to lieutenant colonel.

Capt. Herbert Hill, who entered active duty with the Navy as a lieutenant commander in the Medical Corps on April 26, 1941, has returned to San Antonio to resume practice in diagnosis and internal medicine. Captain Hill spent the last seventeen months of his service in the Pacific Theater, being stationed on Guam from the time of its capture until September this year.

Personals

Dr. Tinsley R. Harrison, dean of faculty at Southwestern Medical College, was awarded the Research Medal of the Southern Medical Association at its meeting November 12-15 in Cincinnati, according to the Dallas *Times-Herald.* The award, which had not previously been presented to a Texas or Southwest physician, was made to Dr. Harrison for outstanding achievements in the fields of heart disease and high blood pressure.

Dr. and Mrs. Carl Sanford Wilson have announced the birth of a son, Carl Sanford Wilson, Jr., on October 29, at Houston.

Dr. and Mrs. D. T. Atkinson, San Antonio, have recently returned from an extended vacation trip, during which Dr. Atkinson was awarded the honorary degree of doctor of science by Centre College, Danville, Ky., reports the San Antonio *Express.* Dr. Atkinson, who did undergraduate work at the college, was recognized for his scientific publications now in use at the college. He recently had received additional recognition for his contributions to scientific literature from the Royal Academy of Medicine in Ireland and the International College of Surgeons in Geneva.

Dr. Henry Schwartze, Kerrville, has been appointed by the State Board of Control as superintendent of the Kerrville State Sanatorium for Negroes with tuberculosis, advises the Kerrville *Times.* He succeeds *Dr. David McCullough,* who recently resigned to enter private practice.

Dr. Chauncey D. Leake, vice-president and dean of the University of Texas School of Medicine, was recently elected vice-president of the Honorary Consultants to the Army Medical Library at a meeting in Cleveland, Ohio, reports the Surgeon General.

Dr. W. A. Lee, Dr. D. K. Jamison, Dr. Turner Wharton, and *Dr. E. L. Hailey* have established the Denison Clinic in the building formerly occupied by the Long-Sneed Hospital, states the Denison *Herald.* Dr. Wharton was formerly a resident of Dallas.

Dr. A. G. Sneed, Denison physician who retired after suffering a heart attack last January, has accepted a position with the Veterans Administration in Waco, according to the Sherman *Democrat.* Dr. Sneed will work with medical records.

Dr. Terrell Speed, of the Scott and White Clinic in Temple, has recently been made a diplomate of the American Board of Surgery, reports the Temple *Telegram.* Dr. Speed is also a fellow of the American College of Surgeons.

Dr. E. S. Freeman has been transferred to the directorship of the Jasper-Newton County Health Unit from a similar position at Abilene, Taylor County, advises the Abilene *Reporter-News.*

Dr. Howard Dudgeon, recently returned from service in the Southwest Pacific with the Army Medical Corps, has been named president of the Hillcrest Hospital medical staff in Waco, the Waco *Tribune-Herald* informs. *Dr. Ernest Johnson,* who has just returned from medical service with a war production plant, is vice-president, and *Dr. Paul Power* is secretary, being re-elected to that position.

Dr. and Mrs. J. G. Dodge celebrated their golden wedding anniversary November 6 when their four sons and approximately one hundred friends called at their Abilene home, states the Abilene *Reporter-News.* Dr. Dodge and his bride left Dallas for West Texas fifty years ago, settling first in Hodges and then moving to Abilene in 1910. Dr. Dodge practiced when he had to make calls on horseback or by horse and buggy; ill health forced his retirement before automobiles were available.

Dr. J. Shirley Hodges, Dallas, who for years has contributed his services as chairman of the medical staff for the district Golden Gloves tournaments, was recently elected president of the Southwestern A. A. U., advises the Fort Worth *Star-Telegram.*

Dr. Minnie L. Maffett, Dallas, who as president of the National Federation of Business and Professional Women's Clubs organized financial aid for nursing schools in China, has been awarded a certificate of membership in the China Relief Legion in New York, states the Dallas *News.* To date the federation has contributed $60,000 to the project. Additional honor to Dr. Maffett came when the Dallas Business and Professional Women's Club recently voted to establish a scholarship in science for a woman in one of the medical schools of Texas, to be known as the Dr. Minnie L. Maffett Scholarship.

Dr. Arthur Jenkins, Dr. Martin H. Benson, and *Dr. Pauline Miller,* all of Lubbock, were recently honored at a dinner given by the Junior Welfare League because of their services to the League's Well Baby Clinic, the Lubbock *Journal* reports.

Dr. Bert C. Ball has been elected first vice president of the Fort Worth-Tarrant County Tuberculosis Society, advises the Fort Worth *Press.*

Marriages

Dr. Branch Craige, Jr., El Paso, was married to Miss Jean McCracken, Joliet, Ill., on August 18, 1945.

Dr. Preston Calvin Stringfield, Jr., Dallas, was married to Miss Bille Waugh Johnson, North Wilkesboro, N. C., September 15, 1945.

Dr. Theodore S. Howell, Houston, was recently married to Miss Mildred Hendrix.

SOCIETY NEWS

Angelina County Society

October 29, 1945

Desmoid Tumors—Charles C. Green, Houston.
Essential Hypertension—Tommie W. Burke, Houston.
Practical X-Ray Diagnosis—Leonard Myers, Houston.

Angelina County Medical Society met October 29 at the Angelina Hotel, Lufkin.

The scientific program by guest speakers, as outlined above, was carried out following dinner.

A number of out of town physicians from Livingston, Crockett, Silsbee, Longview, Palestine, Trinity, and Groveton were present at the meeting.

Bexar County Society

October 25, 1945

(Reported by J. L. Cochran, Secretary)

Relationships of Bexar County Medical Society and the Health Department in Tuberculosis Control—Lewis C. Robbins, San Antonio.
Facilities in the Community Available to Private Physicians in Tuberculosis Control—Capt. R. J. Anderson, M. C., A. U. S., San Antonio.
Diagnosis of Tuberculosis—R. G. McCorkle, San Antonio.

Bexar County Medical Society met October 25 at the Medical Library building with thirty-five present. President Howard M. Bush presided.

In carrying out the above scientific program, Lewis C. Robbins declared that the fundamental principle in keeping tuberculosis under control is to work out a helpful and coöperative relationship between the City Health Department and private physicians. He indicated that the Health Department responsibilities include those to patients who have tuberculosis, to find cases of tuberculosis which might not be found by physicians until in advanced stages, to place patients in hospitals for isolation and treatment, and to put under observation those who had been in contact with known tuberculous persons. Dr. Robbins said that 3,000 food handlers are examined by the San Antonio Health Department every month, and that as soon as a new 70 mm. machine, already authorized for purchase, is secured, each of the food handlers will be given a roentgen-ray examination, since that method is the best known method to diagnose tuberculosis and will reveal 90 per cent of positive cases.

R. J. Anderson pointed out the community facilities available for control of tuberculosis as follows: Tuberculosis Association, which is responsible for the new roentgen-ray equipment being secured by the Health Department; county hospital system, which offers six beds at Robert B. Green County Hospital for surgical patients and seventy-five beds at Southton; Tuberculosis City and County Control Board; and Health Department, which offers a laboratory open to any physician, a tuberculosis clinic at Robert B. Green Hospital, a central registry of tuberculosis cases, and a nursing division.

R. G. McCorkle stated that tuberculosis patients entering institutions now are in about the same condition as such patients were many years ago; that the art of physical examination of the chest is being lost because it is not stressed enough in medical schools; and that the two best methods of diagnosis of tuberculosis are roentgen-ray and sputum examinations. He discussed briefly the differential diagnosis of tuberculosis.

The three papers were discussed by Henry Hoskins, Ervin F. Lyon, Jr., and John J. De Leon.

President Bush read a letter from Dr. Holman Taylor, Secretary of the State Medical Association, concerning the called meeting of the House of Delegates on November 13 and indicating that Bexar County Medical Society is now entitled to four delegates because of its membership increase to 358. John H. Burleson moved that "the chairman be permitted to authorize the appointment of a delegate and an alternate to attend the called meeting." The motion was seconded by John A. McIntosh and passed.

A eulogy to the late Dr. John E. Manney, San Antonio, was read.

Virgil S. Steele was elected to membership.

Falls County Society

October 8, 1945

The Rh Factor in Medicine—M. A. Davison.

Falls County Medical Society met October 8 for dinner and a program at the Falls Hotel, Marlin.

M. A. Davison spoke on the Rh factor, after which there was a general discussion.

Gray-Wheeler Counties Society

October 18, 1945

(Reported by H. L. Wilder, Secretary)

Results of X-Ray Treatment of Superficial Malignancies (lantern slides)—H. L. Wilder, Pampa.
The Cancer Problem, Present and Future Research (lantern slides)—E. W. Lain, Oklahoma City, Okla.

Gray-Wheeler Counties Medical Society met for dinner and a program at the Hillson Coffee Shop, Pampa, October 18, with sixteen present.

H. L. Wilder read the paper named above, which was discussd by H. E. Nicholson, Wheeler; R. A. Webb and J. M. Key, Pampa; and E. W. Lain, Oklahoma City.

Dr. Lain to illustrate his paper showed slides of the different forms and stages of cancer. Dr. Nicholson, Dr. Webb, and others discussed Dr. Lain's paper.

Dr. Nicholson reported the case of a patient with syphilis who had a local reaction in the nose. The patient was treated with penicillin, mepharsen, and bismuth with prompt and rapid improvement of the local condition.

Secretary Wilder stated that J. B. White, president of the Texas Tuberculosis Association, had telephoned from his home in Amarillo to thank the Society for its willingness to coöperate in establishing a tuberculosis sanitorium in the vicinity of Gray-Wheeler Counties. Dr. Wilder also reported that insertions had been made in the advertising campaign against the Wagner-Murray-Dingell bills, at a total cost of $132. He said that four more mats were available, which would cost $39 for each insertion. No action was taken.

R. M. Brown said that county officials had expressed a willingness to have a bond issue for a county hospital. The Society agreed to inform the county judge and city officials that it is vitally interested in voting a bond issue for a city-county hospital. In accordance with a motion passed by the Society, the president appointed a committee composed of Dr. Brown, Dr. Webb, and Dr. P. C. Christian to further the cause of the hospital and to report the action of the Society to the city and county officials and the newspapers.

Upon motion of Dr. Brown, seconded by Dr. Webb, the Society voted to hold subsequent meetings at the Schneider Hotel.

Hidalgo-Starr Counties Society

October 18, 1945

Hidalgo-Starr Counties Medical Society met at the Cactus Tea Room in Mission October 18 with seven representatives of the Valley Health Foundation as special guests. The Foundation's iron lung and trailer were brought for the inspection of Society members, and the two groups discussed health problems and plans for a coördinated program in relation to the problems.

Foundation representatives present were Weldon Martin, R. B. McLeaish, Mrs. Edna Watkins, Mrs.

Ruth Liles, and Mrs. Weldon Blackwell, of Weslaco; A. L. Colson, of Brownville; and Mrs. Carl Miller, of Raymondville.

Hunt-Rockwall-Rains Counties Society

September 11, 1945

(Reported by Harriet Rogers, Secretary)

Auto-Inoculation in Smallpox Vaccination (case report)—J. C. Cheatham, Wolfe City.
Diverticulosis of the Colon—Jack G. Kerr, Dallas.

Hunt-Rockwall-Rains Counties Medical Society met September 11 with President Joe Becton, Greenville, presiding. Eleven members and two visitors were present.

The scientific program outlined above was carried out. The visiting speaker, Jack G. Kerr, of Dallas, described diverticulosis of the colon as an inflammatory reaction in a diverticulum, usually located in the sigmoid, which spreads to the bowel wall and finally reduces the lumen and gives partial or complete obstruction. The condition is characterized by intermittency, and there is usually fever, with cramping abdominal pain, occasionally diarrhea, varying leukocyte count, tenderness and palpable mass in left lower quadrant. Unless there are complications, treatment is medical: bed rest, hot irrigations, antispasmodics and bland low residue diet. The paper was discussed by William P. Phillips and Dr. Becton.

Tarrant County Society

November 6, 1945

(Reported by X. R. Hyde, Secretary)

Group Insurance for Medical and Surgical Service—C. C. Cody, Houston, President-Elect, State Medical Association.

Tarrant County Medical Society met November 6 in the Medical Arts Building Auditorium with forty-eight members and four visitors present. President T. H. Thomason presided.

President-Elect Cody, who was introduced by L. H. Reeves, discussed the basic science law and various hospitalization plans of both profit and nonprofit types. His talk was discussed by George R. Enloe, Tom B. Bond, Judge M. Lyle, R. B. Anderson, Holman Taylor, T. H. Thomason, Hobert O. Deaton, and W. R. McBee, of Dallas, executive director of the Blue Cross Plan.

Tribute was paid to the late Dr. R. W. McKean and the late Dr. John A. Stanfield, both of Fort Worth.

Tilden L. Childs, Jr., was elected to membership.

President Thomason announced that the Northwest Texas District Medical Society would meet in Fort Worth at Hotel Texas on November 15, and urged members to attend. He also encouraged members to send in their Community Chest contributions.

Tom Green Eight-County Society

November 5, 1945

Psychoneurosis—Titus Harris, University of Texas School of Medicine, Galveston.

Tom Green Eight-County Medical Society met November 5 at the Hotel Cactus with Titus Harris, professor of psychiatry at the University of Texas School of Medicine, as guest speaker. Dr. Harris, who spoke on psychoneurosis, indicated that 30 per cent of all illnesses are the products of common neurosis.

A committee was appointed to investigate and confer with members concerning the policy of the San Angelo-Tom Green County Health Unit. Members of the committee named include W. D. Anderson, chairman, K. B. Round, and J. A. Bunyard.

Wharton-Jackson-Matagorda-Fort Bend Counties Society

October 9, 1945

Allergy As Applied to General Practice—Ralph Bowen, Houston.

Wharton-Jackson-Matagorda-Fort Bend Counties Medical Society met October 9 at the El Campo Community Center with twenty-six in attendance.

Ralph Bowen, of Houston, guest speaker, gave an interesting talk on allergy, illustrating his discussion with motion pictures.

Preceding Dr. Bowen's address, the Society had a dinner and a business session.

Fourth District Society

November 7, 1945

(Reported by H. L. Locker, Secretary)

The Fourth District Medical Society met November 7 at the Hotel Brownwood in Brownwood, with Pres. Victor E. Schulze, San Angelo, presiding. The following scientific program was carried out, following the invocation by the Rev. D. L. McCree:

Treatment of Osteomyelitis with Penicillin—Major Isaac W. Kaplan, M. C., Camp Bowie.
Modern Treatment of Hypertension—Major Victor F. Lief, M. C., Camp Bowie.
Use of Endocrines in Gynecology—Karl John Karnaky, Baylor University College of Medicine, Houston.
Obstruction of Colon (lantern slides)—G. V. Brindley, Temple.
Diagnostic Use of Bronchoscope—George S. McReynolds, University of Texas School of Medicine, Galveston.
Obstructive Urethral Lesions in Childhood—Charles A. Hooks, University of Texas School of Medicine, Galveston.
Tropical Diseases of the South Pacific—W. Grady Mitchell, San Angelo.
Erythroblastosis Fetalis; Primary Tumors of Small Intestines—P. M. Wheehs, Brownwood.
Vaginal Bleeding—John D. Weaver, University of Texas School of Medicine, Galveston.
Psychosomatic Problems—Stephen Weisz, University of Texas School of Medicine, Galveston.

At the luncheon, H. F. Connally, Waco, President of the State Medical Association of Texas, and N. D. Buie, Marlin, gave brief addresses.

R. B. Anderson, Fort Worth, chairman of the Public Relations Committee of the State Medical Association, spoke on state legislative problems and public relations at the evening banquet.

Officers elected for the ensuing year included H. L. Locker, Brownwood, president; O. H. Chandler, Ballinger, vice-president; Glenn H. Ricks, Brady, Secretary.

The next meeting will be at Brady in November, 1946.

Eleventh District Society

October 25, 1945

(Reported by J. M. Travis, Secretary)

The Eleventh District Medical Society met October 25 at the Woman's Building in Tyler with approximately forty-five members and twenty visitors present. The following scientific program was carried out:

Anticipation of Difficulties in Labor—William F. Guerriero, Dallas.
Discussion—John M. Travis, Jr., Jacksonville; C. E. Willingham, Tyler.
Preventable and Curable Heart Diseases—Alex W. Terrell, Dallas.
Discussion—Edwin C. Faber, Tyler.
Cancer of the Colon—R. T. Travis and W. H. Sory, Jacksonville.
Discussion—C. C. McDonald, Tyler.
Diagnosis and Treatment of Unusual Chest Conditions—Major Charles E. Gerson, Chief of General Medicine and Chest Section, Harmon General Hospital, Longview.
Discussion—C. B. Young, Tyler.
Thrombophlebitis and Phlebothrombosis in Pulmonary Embolism—Major C. M. Guernsey, Chief of Surgical Service, Harmon General Hospital, Longview.
Discussion—J. C. Shirley, Tyler.

Members of the Society and the Woman's Auxiliary met jointly for luncheon, at which time Dr. H. F Connally, of Waco, President of the State Medical Association, spoke on the Wagner-Murray-Dingell bills. He admitted certain good provisions in the bills, but disapproved the over-all provisions. He traced the development of socialized medicine back to the Bismarck regime in Germany and dis-

cussed its advent in England. His conclusion was that it is not necessary to assume that establishment of socialized medicine is the means by which medicine in the United States must move forward; that the citizens of the United States without benefit of such a plan receive the best medical care of any people in the world.

Following the program, a business meeting was held with President C. B. Young, Tyler, presiding. It was decided to hold the next meeting in Jacksonville in March, 1946.

Thirteenth District Society

November 15, 1945

The Thirteenth District Medical Society met at the Texas Hotel in Fort Worth on November 15 with forty-two present. President J. W. Foy, Seymour, presided. The following scientific program was carried out, following a welcome from T. H. Thomason, Fort Worth, president of Tarrant County Medical Society.

Eczema—E. L. Loftis, Dallas.
Discussion—Porter Brown, Fort Worth; O. J. Emery, Fort Worth.
The Management of Ureteropelvic Juncture Structure (lantern slides)—A. Keller Doss, Fort Worth.
Discussion—Frank S. Schoonover, Jr., Fort Worth.
The Rh Factor—Joseph Hill, Dallas.
Discussion—Sol Haberman, Dallas; May Owen, Fort Worth; Jerrell Bennett, Fort Worth; Frank S. Schoonover, Jr., Fort Worth.
Some Practical Points in the Diagnosis of Chronic Pulmonary Diseases—John A. Wiggins, Fort Worth.
Discussion—Bert Ball, Fort Worth.
The Treatment of Compound Fractures—Frank C. Hodges, Abilene.
Discussion—Charles F. Clayton, Fort Worth; Louis J. Levy, Fort Worth.
Practical Aspects of Hypertension—Arthur Grollman, Dallas.
Discussion—Dewitt Neighbors, Fort Worth.
Diseases of the Cervix—William F. Guerriero, Dallas.
Discussion—R. J. White, Fort Worth; James Barcus, Fort Worth.
Hypertrophic Pyloric Stenosis in Infancy—R. J. White, Fort Worth.
Discussion—J. W. Tottenham, Jr., Fort Worth.

R. B. Anderson, Chairman of the Committee on Public Relations of the State Medical Association, spoke on "The Legislative and Public Relations Program of the State Medical Association of Texas" at the noon luncheon.

A. L. Roberts, Fort Worth, was elected president for the ensuing term; Frank C. Hodges, Abilene, vice-president; and Joe R. Wise, Fort Worth re-elected secretary-treasurer. The next meeting of the Society was announced for some time in the spring of 1946.

TRANSACTIONS

OF THE

EXECUTIVE BOARD
WOMAN'S AUXILIARY
TO THE
STATE MEDICAL ASSOCIATION
OF TEXAS

SAN ANTONIO, SEPTEMBER 26, 1945

The meeting of the Executive Board of the Woman's Auxiliary to the State Medical Association of Texas was held September 26, 1945, in the Medical Library at San Antonio. The board convened at 10:00 a. m. with the president, Mrs. Charles B. Alexander, presiding.

The invocation was given by Mrs. P. R. Denman, as follows:

Invocation

Our Father, who art in Heaven, as we approach the throne of grace, our first utterance would be one of praise for the victory that is ours, a victory over such cruel enemies.

Father, we breathe an especial prayer for those whose hearts have suffered agony, because of this conflict. Comfort, keep, and send to their hearts that "peace which passeth understanding."

As Daniel of old, "we do not present our supplications before thee for our righteousnesses, but for thy great mercies," and we plead that our country may remember that "righteousness exalteth a nation," and in striving to reach a working peace plan that we look to the Prince of Peace for guidance.

Bless us in our homes, and may we realize that our husband's profession gives him the opportunity of service to a suffering humanity, and may we share with him the challenge for such service, treasuring the responsibility as a rich privilege.

Bless our president as she leads in the victory service that our organization can so nobly render, and direct us in the routine work of today, we ask for Jesus' sake. Amen.

The address of welcome was given by Mrs. Frank Steed, president of the Bexar County Auxiliary, as follows:

Address of Welcome

I am happy again to see this representative group of workers of our organization gathered for the purpose of completing plans and making their programs for the year. Since our last meeting in May, we have seen changes in the world which will no doubt have their effect on our organization and our plans.

I do not feel that you need to be told that we are happy to have you with us in San Antonio, the home of our State President. During your stay here we will demonstrate the pleasure that is ours in having you with us. May we remember this meeting for the work that is done as well as for the opportunity of meeting with each other as individuals and as members of committees to do those things that will insure the best year we have ever had; and may we especially remember that these plans were made and perfected in the city that cradled Texas, and from which sprang those worth-while actions of the past that resulted in giving to the world this great progressive domain that stands out among the states and which we love very much.

May your stay with us be most pleasant, and it is our hope that we may have many more opportunities of being with you in San Antonio in the future.

I would like to call your attention to the no-host luncheon following the morning session of the meeting with Mrs. Charles Boehs, chairman. The past presidents of the Bexar County Medical Society are honoring one of our own members, Mrs. C. B. Alexander, with a tea in the home of Mrs. S. F. Gilbreath, 115 Thelma Dr. at 5:30 p. m. All of you are cordially invited.

Mrs. S. H. Watson, Waxahachie, responded to the address of welcome, as follows:

Response to the Address of Welcome

It brings a glow of happiness to my heart to see all your smiling faces and to have this cordial welcome back to San Antonio. As Texas has far more history than many of our American states, so San Antonio has been the center of Texas history. San Antonio, so modern and yet so ancient, probably has more of the old world in its composition than any other city in the country. San Antonio, widely known as the cradle of Texas liberty, was founded by the Spanish in the mission period and still retains a distinctive Spanish cast. More than fifty years ago, Sidney Lanier, who was visiting in San Antonio, was so charmed and delighted with its quaintness and singularly beautiful architecture that he wrote: "San Antonio bristles with striking idiosyncrasies and

bizarre contrasts." Even today the romance built around old San Antonio vies for fascination with all the interest clustering around this beautiful city of highest culture and up-to-date improvements.

The doctor and the doctor's wife have contributed largely to the educational and cultural development of San Antonio. For years you have graciously and generously provided for the meeting of the State Medical Association and the Woman's Auxiliary to the State Medical Association. Your renewed welcome carries with it genuine cordiality of years gone by. In the name of the Auxiliary I accept your proffered hospitality.

Greetings from the past presidents were extended to the members of the Executive Board by Mrs. W. M. Hibbits, Texarkana. She traced the growth and marked progress of the group from its meager beginning to date.

Mrs. George Turner, El Paso, president-elect of the State Auxiliary, addressed her remarks "Looking Ahead" to the group:

Report of President-Elect

May I tell you how happy I am to be here today and what an inspiration it is for me to be able to "tag along," so to speak, picking up all the information possible concerning the details of the auxiliary work and organization.

In West Texas, auxiliaries are few and contact with the members of the groups is not possible except through letters and reports and the annual visit of our state president, which we always enjoy so much and look forward to so eagerly.

Since our last meeting, May 16, 1945, world events have moved at such a pace that two wars have ended and we are now living in a different age. I am sure each of you reacted to these events with mingled emotions: relief, joy, sadness, and then the realization that the only answer to the split atom is a world united for peace and service to mankind.

The times are still critical and our auxiliary must now direct its efforts to a postwar program. In looking to the future it seems only logical that our first efforts should be directed toward returning to normalcy.

First, we will be glad to have all our service doctors back home, sharing the practice in their respective communities and thereby bringing some measure of relief to those who did not go to war but who worked many extra hours, so that the home front would not suffer for lack of medical attention. Let us welcome them as they return, and help them and their families to get settled again in civil life.

Second, let us plan for an immediate return to the annual state meeting, thereby enabling us to keep in closer contact with the various auxiliaries and the State Medical Association than has been possible during war time.

Third, place more emphasis on our original projects, since the need for many of our war projects has ceased to exist.

I wish to take this opportunity to thank Mrs. Alexander and the chairmen of various standing committees for their thoughtfulness in sending me material which has been very helpful; I also want to thank others of you for your sweet letters of good wishes and encouragement. May I ask that you continue to keep me on your mailing list as this seems to be the very best way of keeping in contact with the work as it develops.

The president appointed Mrs. R. B. Homan to serve as parliamentarian of the day.

The president then called for the reading of the minutes of the last board meeting. Upon motion of Mrs. Mark H. Latimer, Houston, it was voted to dispense with the reading of the minutes.

Letters from Dr. Holman Taylor, Secretary of the State Medical Association, Dr. R. B. Anderson, chairman of the Committee on Public Relations of the State Medical Association, and Mrs. A. B. Pumphrey, chairman of the Legislation Committee of the State Auxiliary, were read by Mrs. Wilber F. Robertson, corresponding secretary, San Antonio. An appeal was extended to all auxiliary members and societies, as a body, to exert influences against the socialization of medicine. Suggestions were made as to how this information could be disseminated.

Outline of the year's work was then presented through the reports of officers and chairmen of committees as follows:

Report of the Treasurer

To the President and Executive Board members of the Woman's Auxiliary to the State Medical Association of Texas, I submit the following report for your approval, correction, and acceptance.

Statement of Operations

Woman's Auxiliary to the State Medical Association of Texas

May 1, 1945, to September 25, 1945

Cash Balance May 1, 1945, as per Audit:		
General Fund	$ 760.00	
Student Loan Fund	6,574.75	
Memorial Fund	809.44	
Library Fund	175.50	
Total		$8,319.69
Receipts:		
General Fund	$ 106.50	
Student Loan Fund	736.46	
Memorial Fund	338.50	
Library Fund	7.00	
Total		$1,188.46
Total		$9,508.15
Disbursements:		
General Fund	$ 83.75	
Student Loan Fund	none	
Memorial Fund	740.00	
Library Fund	none	
Total		$ 823.75
Cash Balance September 25, 1945		$8,684.40

General Fund Operations

Cash Balance May 1, 1945		$ 760.05
Receipts:		
Hopkins-Franklin Auxiliary	$ 8.00	
Johnson Auxiliary	6.00	
Nacogdoches Auxiliary	7.50	
Mrs. Reavis Pickett	1.00	
3rd District	26.00	
Knox Auxiliary	1.50	
Mrs. O. B. Atkinson	1.00	
Mrs. M. C. Williams	1.00	
5th District	17.00	
Six County Auxiliary	2.00	
Travis Auxiliary	13.50	
DeWitt-Lavaca Auxiliary	13.00	
Mrs. C. B. Alexander	2.50	
3rd District	1.00	
13th District	5.50	
Total Receipts		106.50
Total Cash		$ 866.55
Disbursements:		
Mrs. Paul H. Power, 4th Vice Pres.	$ 10.00	
National Dues—late	8.75	
Lodavic Printing	65.00	
Total Disbursements		$ 83.75
Total Cash Balance September 25, 1945		$ 782.80

Student Loan Fund Operations

Cash Balance May 1, 1945		$6,574.75
Receipts:		
Nacogdoches Auxiliary	$ 2.50	
M. F.	25.00	
H. G. W.	25.00	
H. S.	9.00	
M. F.	25.00	
Wharton-Jackson Auxiliary	2.00	
M. F.	25.00	
H. S.	100.00	
Bell Auxiliary	17.50	
J. T. R.	216.50	
H. G. W.	20.00	

H. G. W.	268.96	
Total		$ 736.46
Total Cash		$7,311.21
Disbursements:		
None		
Cash Balance September 25, 1945		$7,311.21

Memorial Fund Operations

Cash Balance May 1, 1945		$ 809.44
Receipts:		
Travis Auxiliary	$ 25.00	
Nacogdoches Auxiliary	2.50	
Mrs. E. W. Coyle	12.00	
Mrs. John T. Moore	2.00	
Six County Auxiliary	5.00	
Wharton-Jackson Auxiliary	2.00	
Dallas Auxiliary	50.00	
Mrs. P. R. Denman	5.00	
Bexar Auxiliary	5.00	
R. S.	230.00	
Total		338.50
Total Cash		$1,147.94
Disbursements:		
Federal Reserve National Bank of Dallas, May 2, 1945		740.00
Cash Balance September 25, 1945		$ 407.94

Library Fund Operations

Cash Balance May 1, 1945		$ 175.50
Receipts:		
Liberty-Chambers Auxiliary	$ 2.00	
Six County Auxiliary	5.00	
Total		7.00
Total Cash		$ 182.50
Disbursements:		
None		
Cash Balance September 25, 1945		$ 182.50

MRS. F. R. RUGELEY, Wharton.

REPORT OF FIRST VICE-PRESIDENT—ORGANIZATION CHAIRMAN

We shall map our course of organization and follow the beam of former vice-presidents who have served so ably as chairmen of organization.

Believing that a larger group of active, interested members means greater support to the medical profession, we stress the significance for opportunities to organize those counties in which no organization exists and to extend and perfect our organizations in those already organized. We believe that growth depends on keeping constantly before us the reasons and the objectives for our organization, and we recommend that annually presidents of the state and county auxiliaries discuss them with their members at the first meetings. We realize more than ever that serious legislative plans face the profession and every doctor's wife is needed in our great auxiliary. I earnestly urge the help of each individual member for this year's work.

MRS. S. M. HILL, Dallas.

Mrs. Hill further stated that although the auxiliary now has 2,077 members and 132 members-at-large, the membership goal for this year would be 3,000. Each council woman present was introduced by Mrs. Hill.

REPORT OF THIRD VICE-PRESIDENT—HYGEIA CHAIRMAN

The following letter has been sent to each of the county auxiliary presidents and chairmen of the Hygeia program:

I know you are anxious to start work on your *Hygeia* sales for the year. Perhaps you have already made plans to promote your Hygeia program. If you have not, I am sending some suggestions which you might find helpful in planning your campaign.

As you no doubt know, the American Medical Association urges the Woman's Auxiliary, as one of its chief activities, to promote the distribution of *Hygeia*, not only to doctors and their families but to Parent-Teachers Associations, Boards of Education, Study Clubs, and similar bodies interested in education. It has long been used by schools as a text and reference book for essays and talks of all types of Health Education. It is the one magazine that gives authentic information on all types of health problems.

We have five months in which to complete our Hygeia program, but I urge you to promote your drive and get your subscriptions in as early as possible. Last year there were difficulties in getting the late subscriptions filled. Some of them had to be delayed for several months. The Woman's Medical Auxiliary is being given first chance at the limited number of one year renewals and new subscriptions before they are offered to the general public.

In planning your drive, I suggest you have your program fully planned and have a concerted campaign for *Hygeia*. Plan your drive to last two weeks to a month. If it is drawn over a long period of time, interest is lost and your sales lag.

Contact all schools and libraries.

Contact Study Clubs, especially Child Study Clubs, Mothers' Clubs, etc.

Contact public health nurses, and associations interested in public health and welfare.

In the larger auxiliary groups, appoint sub-chairmen and apportion the names of the groups to be contacted.

If your auxiliary group covers several towns, appoint a sub-chairman for each town and have them contact the different groups in their respective areas.

With the permission of the president of your local medical society, give a short talk on your drive and its object and pass out your subscription blanks to be filled in. You can have your doctors mail their checks to you. Don't forget the special offer made to physicians and their families.

Don't forget your dentists.

You will be sent sample copies of *Hygeia* and order blanks to be used in your drive, together with the information about rates, subscription prizes, etc., from the publishers of *Hygeia*.

I do hope this has been of some help to you. If there is any other information I can give you, I shall be most happy to furnish it.

MRS. TROY A. SHAFER, Harlingen.

REPORT OF FOURTH VICE-PRESIDENT—PROGRAM CHAIRMAN

In addition to a letter sent to each county president and council woman, the fourth vice-president presented her program, as given below, as a pattern for auxiliary activities this year:

These program suggestions have been compiled after study of the aims and policies of our state president and her officers. I realize this outline is coming to you none too early. However, it is not a radical change from the program suggestions of previous years and it is my sincere hope that you can follow it to advantage.

1. *Health Institute or Forum.*—I hope we can do a real job this year to promote health. The larger auxiliaries could have an all day health institute held at a place accessible to doctors. Different doctors could give talks during the day—each followed by an open forum period. Discussions of women's diseases and of child care would be most valuable. Programs placed in the hands of clubs throughout the city in advance would give the project ample publicity and surely would further our public relations work. The smaller auxiliaries could have a health forum, probably at night, with several doctors in the community taking part in the program. Let us make our community, large or small, realize that the improvement of health is our objective. Let

us do this by improving conditions in our community and disseminating information.

2. *Health Hint of the Month.*—The sponsoring of a health essay in the public schools is surely a splendid way to advance health ideas with the younger generation. However, many schools have of late refused to coöperate—not because the idea is not good but because the English program is crowded. This year I am going to experiment a bit. In conjunction with the Hygeia chairman I wish to promote a monthly contest, "Health Hint of the Month." This will be a statement of not more than fifty words expressing the student's view of the most valuable information on health gleaned from month to month. The State Auxiliary will offer a monthly prize of $5 for the best paper submitted. It is hoped that the county auxiliaries will supplement this with a small local prize each month. This, however, is not necessary. Complete details of the rules governing this contest will be mailed to you immediately following the board meeting, September 26.

3. *Health Films.*—A complete list of the films available through the State Medical Association will be sent to you. Do try to make these films available to the public. A good medium is the P. T. A. Again we are helping Mr. Average American in our community with his health problems.

4. *Doctors' Day.*—Our doctors are ever fighting to raise the standards of health. Our program on health is consistent with our auxiliary role as helpmate. Now let us not forget to honor our doctors with a festive, family get-together at least once during the year.

5. *Legislation.*—If we do a good job of education and improvement along health lines, surely we are better equipped to enlist help in our fight against adverse legislation. Let's stay awake.

This seems like a lot to do. We have the year ahead of us, the war is over, the field is ours.

Mrs. Mark H. Latimer, Houston.

Report of Legislative Chairman

The following letter was sent to each county president outlining a suggested program of effective legislative moves:

We are being asked again to aid our doctors in their fight against the socialization of medicine. There is every reason to believe this year will bring on the "death struggle" of socialism in every form.

You will find enclosed copies of letters addressed to presidents and secretaries of county medical societies by the Public Relations Committee of the State Medical Association, outlining a proposed program of opposition to the efforts to socialized medicine. We are asked to coöperate closely with our county medical societies in this program. This correlation is important to prevent duplication of effort. The auxiliaries can make special efforts to furnish speakers for clubs and various organizations to which our members belong. These meetings should be given publicity in the newspapers, both before and after they are held, and reporters should be invited. If they cannot come, be certain they are given full accounts for publication. Material for talks is obtainable at the State Medical Association headquarters, 1404 West El Paso Street, Fort Worth.

We should individually write our Congressmen urging them to vote against these bills and urge our lay friends to write, also.

We may expect to receive new information from time to time from the Public Relations Committee.

Let us again coöperate in this great work for humanity, and our husbands!

Mrs. A. B. Pumphrey, Fort Worth.

Report of Public Relations Chairman

The chairman of Public Relations suggests health days to be stressed by each auxiliary, study and discussion of the history of medicine and of various phases of juvenile delinquency, and extension of courtesies to sons of physicians who might be stationed with military units in our cities.

Mrs. W. R. Snow, Abilene.

Miscellaneous Reports

Mrs. Frank Haggard, San Antonio, chairman of the Library Committee, asked that each auxiliary work up more enthusiasm for the Library Fund. She asked Mrs. Sam E. Thompson to elaborate as to how each auxiliary can be more responsive. Mrs. Thompson appealed to the pride of each present by stating that Texas has next to the finest medical library in the U. S. A. She explained how extensively the library facilities have been used by our doctors in military service and in our home bases.

Mrs. H. Leslie Moore, Dallas, historian, requested that county presidents send any material which they would like preserved, especially yearbooks and newspaper clippings of auxiliary meetings on programs.

A goal of $10,000 is being worked toward by Mrs. O. M. Marchman, Dallas, chairman of the Memorial Fund. She appealed for greater and more regular contributions from each auxiliary.

Mrs. M. L. Graves, Houston, chairman of the Student Loan Fund, remarked about the many letters she has received from our physicians in service who are sending regular payments toward the liquidation of their loans.

A report of the George Plunkett Red Fund was presented by Mrs. W. E. Ramsey, Houston. A book value of trust as of September 1, 1945, represented $4,784.20.

Mrs. R. B. Homan, El Paso, chairman of Revisions Committee, asked that any suggested or desired revisions to the auxiliary constitution be directed to her for consideration.

Mrs. E. H. Marek, Yoakum, Texas Research for S. M. A., asked that copies of our auxiliary papers be sent to the library of the Southern Medical Association for recording and filing.

Mrs. Cecil O. Patterson, Dallas, chairman of Bulletin, although not present for the executive board meeting, sent an appeal for every auxiliary member to subscribe for the Bulletin at $1 per year.

The Budget and Finance chairman, Mrs. W. M. Hibbits, Texarkana, stated that nothing new had materialized since the budget was voted and approved during the past board meeting in May, 1945.

Mrs. P. R. Denman, Houston, chairman of the Memorial Service, asked that she be notified immediately of a need for her services so she can render courtesies when they would be most helpful. Mrs. Sam E. Thompson suggested that the State Journal editor be notified of deaths of our doctors' wives.

Mrs. Sam E. Thompson, Kerrville, chairman of the nominating committee, requested a meeting of her group immediately following the luncheon.

Mrs. Charles B. Alexander, the president, introduced the members of the San Antonio hostess committee. An invitation was extended by Mrs. Frank Haggard for each woman present to attend a tea, 5:30 to 7:00 p. m., at the home of Mrs. S. F. Gilbreath, 115 Thelma Drive, honoring Mrs. Charles B. Alexander, given by past presidents of Bexar County Auxiliary.

The council women and presidents of county auxiliaries who were in attendance at the Executive Board meeting were recognized. Each gave a brief outline of her plans for the year.

The morning session of the Executive Board meeting was adjourned.

A most delightful no-host luncheon was enjoyed in the Medical Library Building. The very lovely flower arrangement was the gift of Mrs. Sam E. Thompson.

The afternoon session began promptly at 2:00 p. m.

ADDRESS OF DR. JOHN H. BURLESON

Dr. John H. Burleson, chairman of the Legislative Committee, State Medical Association, stated that the Auxiliary was a very important ally of the State Medical Association. He traced the historical development of the Woman's Auxiliary, by saying that in the beginning it was purely a social organization for doctors' wives and daughters. He paid honor to the program of the auxiliary, especially its legislative, public relations, and propaganda outlets, and the places of leadership each doctor's wife assumes in her respective church, social and civic activities.

He spoke directly to the point of socialization of our country as a whole and to medicine in particular. The public now demands more and better medicine than in the past years. The question of just how much socialization is good for the practice of medicine is a debatable one. Private physicians do furnish good medical care and will continue to do so as research brings forth new and better methods of diagnosis and treatment.

Dr. Burleson asked each auxiliary member and group to oppose the Wagner-Murray-Dingell bills, which propose socialized medicine in its worst form. There are now two bills pending before Congress, one of which, the Hill-Burton hospital construction bill, is greatly needed. The bill provides that a survey of hospital and public health facility needs be made by state health officers; money is provided on a federal matching basis with the reservation of the right to determine how appropriations are to be expended. Advocates of this bill state that medical service is not available to the masses. There is a very great difference in medical service and *adequate* medical service. Most private physicians render much more charitable service than any lay persons realize. The private practice of medicine is different now than in times past. Because of our present military emergency, the physician has not time to serve as counselor to his patient to the same degree and extent that he had in the past.

Dr. Burleson believes that socialized medicine is now attempting to come into final effect through local public health units. He thought Senate Bill 191, the Hill-Burton hospital construction bill, was meritorious if kept under proper control. Hospitals would be provided for rural communities where such facilities are not now available or adequate. Need for such hospitals would have to be determined by surveys conducted by health department personnel. Caution would have to be used in selecting the final sites for these hospitals. Dr. Burleson remarked that the primary purpose of most hospitals is to make money. He does not believe any hospital should be exempted from tax payments. He disapproved of the fact that this bill has no provision to give physicians and their organization a voice in making the selection for the locations of these hospitals. A well qualified doctor will not practice where there is no hospital, which is his workshop. The Legislative Committee of the Medical Association plans to request that a committee of doctors be appointed to work with the State Health Department in the location of these hospitals.

Dr. Burleson asked the members of the Auxiliary to act in support of the Hill-Burton bill and against the Wagner-Murray-Dingell bills by seeing that the public is properly informed. He believed that the American people had a right to make their own decisions about any matter pertaining to their lives.

The medical profession has made many mistakes, but any group does as it grows and progresses. There is much less commercialization in the practice of medicine than in any other field. Advancement and progress is as adequate if not more so than in any other field.

ADDRESS OF DR. R. A. MILLER

Dr. R. A. Miller, San Antonio, member of the Public Relations Committee of the State Medical Association, addressed the group on the work being done toward disseminating information so everyone can know better the merits or fallacies of proposed medical legislation.

The Public Relations Committee is attempting to educate doctors generally by news letters. Abstracts are being sent out on complicated bills which most busy doctors will not take time to analyze so that they will be adequately prepared to inform the layman. In the past medicine has been kept a secret and in the dark from the public, but now the public relations committees of state medical societies are giving wide medical interpretation through newspapers, radio, and speakers bureaus. Information which is valid is available for use in auxiliary meetings or for any community group which can be interested. If people are properly informed they should know better how to act.

Dr. Miller spoke to the point of high taxation and increased regimentation against the free American system.

A government program of socialized medicine would be too expensive and the administration might prove as ineffectual as some of the examples already set in embryonic proportions in our Veterans Administration, federal-state health set-ups, and so forth. Some of the practices of the present Veterans Administration were cited as examples. Some of the boys in military service are so thoroughly disgusted with the regimentation by the government that they prefer to consult their own private physician, from whom they say they can obtain more efficient and quicker services than those rendered under present government administration.

Comparative costs of private medical service fees were most effectively presented by Dr. Miller as against money spent by people for cosmetics, tobacco, and liquor.

Adequate protective medical care can be made available to any person desiring it through many good insurance plans which cost on an average of $22 yearly.

General education of the public can be effected by physicians sharing more medical information in an educational way. Present clinical facilities can be expanded. More doctors could give more generously of their time and talent to local charity services. An intensive, expansive advertising campaign should be conducted showing the merits of private insurance companies' medical protective plans over government plans. The public needs to be better informed along medical lines. It is up to the doctor to do it adequately.

The prospects of the Wagner-Murray-Dingell bills at the present time were commented upon by Dr. Miller. The politicians and taxpayers especially are sick and tired of huge government debt and increased government infiltration into individual areas. Boys returning from military service will not vote for such a high-cost medical plan. However, optimism should not deter constant attempts properly to inform the greatest number of citizens, so that if the time comes for the voter to pass final judgment, he will know specifically what he is voting for or against in the way of proposed medical services.

Dr. Miller concluded by again stressing that interpretation could be effected by radio, mail, speeches, and special speakers provided by the Public Relations Committee.

The president then called upon Mrs. W. J. Johnson, chairman of registration, who reported there were 60 persons in attendance; 8 officers; 20 committee chairmen, 2 council women, 12 county presidents, 2 representatives from the State Medical Association, and 1 visitor.

There being no further business, the meeting was adjourned at 2:20 p. m.—MRS. PAUL H. POWER, Waco, Recording Secretary.

AUXILIARY NOTES

Officers of the Woman's Auxiliary to the State Medical Association of Texas: President, Mrs. C. B. Alexander, San Antonio; President-Elect, Mrs. George Turner, El Paso; First Vice-President, Mrs. S. M. Hill, Dallas; Second Vice-President, Mrs. L. W. O. Janssen, Corpus Christi; Third Vice-President, Mrs. Troy A. Shafer, Harlingen; Fourth Vice-President, Mrs. Mark H. Latimer, Houston; Treasurer, Mrs. F. R. Rugeley, Wharton; Recording Secretary, Mrs. Paul H. Power, Waco; Corresponding Secretary, Mrs. Wilbur Robertson, San Antonio; Publicity Secretary, Mrs. E. L. Howard, Fort Worth; Parliamentarian, Mrs. W. R. Klingensmith, Amarillo.

AUXILIARY NEWS

Bexar County Auxiliary past presidents honored Mrs. Charles B. Alexander of San Antonio, president of the State Auxiliary, with a tea at the home of Mrs. S. F. Gilbreath, San Antonio, on September 26.

Dallas County Auxiliary met November 7, 1945, at the Dallas Country Club for a luncheon honoring Mrs. Charles B. Alexander, San Antonio, president, and Mrs. S. M. Hill, Dallas, first vice-president of the State Auxiliary, and Mrs. O. W. Robinson, Paris, council woman of the Fourteenth District.

Mrs. Joseph H. McCracken, Jr., presided and Mrs. O. M. Marchman was in charge of the program, for which Mrs. Alexander spoke.

Mrs. Robinson introduced the presidents of the other auxiliaries in the district, who were guests of the Dallas County Auxiliary, and they in turn presented members of their auxiliaries who were in attendance.

Hostesses were members of the legislative and advisory committees: Mesdames S. F. Harrington, H. Leslie Moore, O. M. Marchman, S. M. Hill, Albert D'Errico, Everett Jones, and Davis Spangler.

Ellis County Auxiliary met for luncheon October 17, 1945, at J. and H. Cafe in Waxahachie, with fourteen present. Mrs. S. H. Watson, president, presided.

Plans were made for a memorial service for Dr. Ted Curby, Lt. (jg), M. C., U. S. N. R., of Maypearl, who was killed last spring when his ship was attacked by a Japanese suicide plane off Okinawa. The service was scheduled for November 9 and to be open to the public.—Mrs. S. H. Watson, President.

El Paso County Auxiliary met October 8 in the home of Mrs. Jesson L. Stowe, with Mrs Robert Thompson presiding.

Mrs. George Turner, president-elect of the State Auxiliary, reported on the state executive committee meeting held in San Antonio recently.

A musical program arranged by Mrs. J. L. Green included accordion selections by Miss Bernice Gottlieb. Tea was served during the social hour.

Cohostesses for the meeting were Mesdames F. O. Barrett, J. Travis Bennett, C. P. Brown, George Brunner, I. J. Bush, Arthur H. Butler, J. W. Cathcart, J. C. Carter, E. J. Cummins, W. J. Davis, A. J. Eck, Orville Egbert, R. L. Gaddis, S. J. Gaddy, B. L. Goodloe, James Gorman, J. L. Green, W. C. Beasom, and W. W. Britton.

Grayson County Auxiliary held a luncheon meeting October 5 at the Grayson Hotel, Sherman.

Mrs. W. A. Lee, president, announced the following committees for the ensuing year:

Public relations and legislative: Mrs. Vernon Tuck, Sherman, chairman; Mrs. J. C. Bates, Sherman; Mrs. Frank Sporer, Van Alstyne; Mrs. Paul Pierce, Denison; Mrs. D. K. Jamison, Denison.

Program: Mrs. Arthur Gleckler, Sherman, chairman; Mrs. B. Brown, Sherman; Mrs. D. C. Enloe, Sherman; Mrs. J. A. Mayes, Denison; Mrs. F. F. Fowler, Denison; Mrs. S. O. Levin, Denison; Mrs. John Gleckler, Denison.

Hygeia: Mrs. Doak Blassingame, Denison, chairman; Mrs. D. C. Enloe, Sherman.

Publicity: Mrs. B. Brown, Sherman.

Physical Examinations: Mrs. C. B. Carraway, Sherman; Mrs. J. A. Mayes, Denison.

Health Program: Mrs. John Gleckler, Denison, chairman; Mrs. Don Freeman, Denison.

Blood Collections: Mrs. Max Woodward, Sherman; Mrs. E. L. Hailey, Denison.

Mrs. Woodward led a discussion regarding blood collection for the county, emphasizing the collection to be held later in the month.

Mrs. B. T. Brown and Mrs. D. C. Enloe, Sherman, had arranged decorations consisting of a centerpiece, which was a miniature prescription counter flanked by large glass containers of colored water, and place cards, which were pill boxes containing pink pills and green capsules of fondant.

Grayson County Auxiliary was host to the Medical Society for dinner at the Hotel Denison in Denison, November 5, with Mrs. Charles B. Alexander, San Antonio, president of the State Auxiliary, as guest speaker.

Mrs. W. A. Lee, president of the Grayson County Auxiliary, presided and introduced the speaker, who explained the proposed basic science law and other medical legislation now pending before the state and federal lawmaking bodies. Mrs. Alexander also told of the plan of the Auxiliary to combat juvenile delinquency with a program of hygiene, believing that good morals and good health go together.

Mrs. E. E. Miller sang, the Rev. V. Cyrus Barcus gave a cornet solo, and Mrs. H. H. Lewis, of Sherman, played three accordion selections. Miss Lula May Hays was accompanist.

Mrs. O. W. Robinson, of Paris, council woman of the North Texas District, was a guest. In charge of arrangements were Mesdames D. K. Jamison, F. F. Fowler, S. O. Levin, John Gleckler, J. A. Mayes, and Arthur Gleckler.

A harvest theme was followed in table decorations, with centerpieces of pumpkins filled with fall fruits and vegetables circled with bronzed autumn leaves and fall berries. Yellow candles glowed in brass candelabra.

Tarrant County Auxiliary met at Hotel Texas in Fort Worth on November 2 with T. H. Thomason, president of the Tarrant County Medical Society, as guest speaker. Dr. Thomason discussed current medical legislation, and was introduced by R. B. Anderson, Chairman of the Committee on Public Relations of the State Medical Association. Representatives of other women's clubs in Tarrant County, superintendents of hospitals, and public health officials were guests.

Taylor-Jones Counties Auxiliary officers were guests at a luncheon honoring Mrs. George Turner, president-elect, and Mrs. R. B. Homan, a past president of the State Auxiliary, given by Mrs. William R. Snow, Abilene, on October 1. Mrs. Turner and Mrs. Homan were en route to their homes in El Paso following a meeting of the state executive board in San Antonio. Miss Ann Turner, who had accompanied her mother to San Antonio, also attended the luncheon.

The informal home luncheon program consisted of talks by Mrs. Turner, who emphasized that the legislative program of the Auxiliary would be featured this year, and by Mrs. Homan, who sketched the program of the Auxiliary since its organizational meeting in 1928, where she was present.

Mrs. L. W. Hollis, president of the Taylor-Jones Auxiliary, introduced the following officers: Mrs.

Erle D. Sellers, president-elect; Mrs. C. A. McFadden, first vice-president; Mrs. Hubert Seale, third vice-president; Mrs. T. B. Bass, delegate to the City Federation; Mrs. Frank C. Hodges, parliamentarian; Mrs. C. L. Prichard, Bulletin representative; and Mrs. Snow, public relations chairman for both the State and Taylor-Jones Counties Auxiliaries.

Dr. Snow's niece, Dr. Virginia Boyd, Miss Turner, and Mrs. R. L. Faucett, were also present.

Travis County Auxiliary entertained the Medical Society at a buffet supper November 13 at the Austin Country Club. Hostesses included Mrs. G. F. Thornhill, chairman, and Mesdames Ben R. Eppright, Joe Gilbert, George Cox, Harriss Williams, Charles P. Hardwick H. L. Hilgartner, Jr., Carl F. Moore, A. L. Nanny, L. C. Paggi, Forrest A. White, and James T. Robison.

Wharton-Jackson-Matagorda-Fort Bend Counties Auxiliary met October 9 at the El Campo Community Center with Mrs. J. M. Bauknight, of Ganado, presiding.

Following a dinner held jointly with the Medical Society, the Auxiliary discussed an essay contest in which a prize will be awarded to a Texas school child writing the best essay on health.

Wharton-Jackson-Matagorda-Fort Bend Counties Auxiliary met November 13 at the New Gulf Country Club with nine members present. Prior to a business session, the Auxiliary and the Medical Society were guests at a barbecue dinner given by Dr. and Mrs. J. W. Simons and Dr. and Mrs. R. G. Johnson.—Mrs. Borden W. McGee.

Wichita County Auxiliary met at the home of Mrs. M. H. Glover in Wichita Falls on November 6. Approximately thirty members and guests were present.

Mrs. Charles B. Alexander, San Antonio, president of the State Auxiliary, was guest of honor at tea and was the speaker for the meeting. Mrs. H. P. Ledford, president of the Wichita County Auxiliary, introduced Mrs. Alexander, who described the activities of the State Auxiliary, emphasizing that it is an organization through which the ideals and accomplishments of scientific medicine are presented to the public. She also spoke of the Auxiliary's health program through which educational films are made available to the public free of charge from the State Medical Association Library. The Auxiliary also supports a memorial fund and contributes to the library.

During a business session plans were outlined for a special social service project to assist tuberculosis patients at the Wichita County Farm.

Autumn flowers decorated Mrs. Glover's home, with a centerpiece of carnations on the tea table.

Hostesses were Mesdames Glover, Austin F. Leach, B. M. Dorbandt, R. L. Daily, Bailey Collins, F. R. Collard, Harry Ledbetter, A. D. Pattillo, and W. B. Adams.

BOOK NOTES

[1]**Cancer of the Colon and Rectum.** Its Diagnosis and Treatment. By Fred W. Rankin, B. A., M. A., LL.D., Sc. D., F. A. C. S. Surgeon, St. Joseph's and Good Samaritan Hospitals, Lexington, Kentucky, and A. Stephens Graham, M. D., M. S. (in Surgery), F. A. C. S., Surgeon, Stuart Circle Hospital, Richmond, Virginia; Assistant Professor of Surgery, Medical College of Virginia. Fabricoid, 358 pages. Second printing. Price, $5.50. Springfield, Illinois, Charles C. Thomas, Publisher, 1945.

This monograph is still of fundamental value to any surgeon interested in major surgery of the colon and rectum. The chapters on diagnosis, operability, and prognosis embody facts which have undergone no change in recent years; the description of the operative procedures for cancer of the rectum are still authentic and the conclusions drawn from the wide experience of the authors are even yet of definite value.

Fortunately, when this book was first published, the generally accepted principles concerning the preparation of all patients upon whom surgery of the colon is contemplated had been arrived at, preoperative peritoneal vaccination had been abandoned, and current methods of anesthesia determined upon; for these reasons, the "second printing" instead of a revision of the text is justifiable

The services of General Rankin and Colonel Graham in the military forces have no doubt precluded such a revision. It is interesting to speculate, however, as to what additional subjects would have been included had the text been rewritten. Certainly a discussion of the availability of the sulfonamides for preoperative preparation of patients for surgery of the colon is one. The use of nonabsorbable sutures such as steel wire or cotton would possibly be another. During the past six years the advocacy of routine primary resection of colonic tumors and the reestablishment of continuity of the bowel after resection of rectal tumors have become sufficiently urgent to justify unprejudiced appraisal.

This text is still an essential on the book shelf of the colonic surgeon.

[2]**Psychiatry in Modern Warfare.** By Edward A. Strecker, A. M., M. D., Litt. D., LL. D., Professor of Psychiatry and Chairman of the Department, School of Medicine, University of Pennsylvania; Consultant for the Secretary of War to the Surgeon-General of the Army and Army Air Forces; Consultant to the Surgeon-General of the Navy; Consultant to the Surgeon-General, U. S. P. H. S., and Kenneth E. Appel, Ph. D., M. D., Sc. D. Assistant Professor of Psychiatry and Chief of Clinic, School of Medicine, University of Pennsylvania. Cloth, 88 pages. Price $1.50. New York, The Macmillan Company, 1945.

Dr. Strecker and Dr. Appel, in this little volume, have given a concise yet remarkably complete and factual description of psychiatric implications of modern war.

Psychiatry in World War 1 and World War 2 is compared and discussed. There is frank recognition of failure at the beginning of World War 1 because of the lack of psychiatric leadership, which was followed by rapidly developed psychiatric organization and improved therapies.

Although much of the volume consists of brief summaries and quotations from other psychiatrists who have contributed to psychiatry in the war, the authors found space to inject some of their own ideas and conclusions, which denote the commonsense approach to psychiatry and mental hygiene and express the viewpoint of the majority of American psychiatrists who have been identified with psychiatry either in the military forces or civilian life.

The statistical data which reveal an increase in neuropsychiatric casualties as the result of war is startling. The reasons for the increase in the anxiety states in World War 2 in contrast to the conversion hysterias seen in World War 1 are clearly defined. Emphasis is given to the tremendous interest in psychosomatic disorders, and it is the authors' opinion that "observations made in psychosomatic medicine may turn out to be one of the great medical con-

[1]Reviewed by Curtice Rosser, M. D., Dallas, Texas.

[2]Reviewed by Arthur J. Schwenkenberg, M. D., Dallas, Texas.

tributions to World War 2." Psychoses, as in World War 1, showed no great increase. The one great difference in the two wars mentioned by the authors has been in the application of preventive psychiatry in the last war.

Part 2 of the volume deals with demobilization and the return to civilian life which gives much food for thought to all citizenry, professional and laymen alike. The authors' discussion and explanation of the meaning of psychoneurosis is especially well done, and if for no other reason this publication is a contribution towards a better and more tolerant understanding of the psychoneuroses and psychoneurotic personality.

These two authors, known for their many excellent contributions to psychiatric literature, have succeeded again by reason of their observation of psychiatry in modern warfare in writing a practical guide which could serve to point the way to better mental health in the postwar world.

VENEREAL DISEASE ABSTRACTS*

The Frequency of Positive Serologic Tests for Syphilis in Relation to Occupation and Marital Status Among Men of Draft Age. Lida J. Usilton, Paul T. Bruyere, and Martha C. Bruyere, Journal of Venereal Disease Information, Washton, 26:216-222 (Oct.) 1945.

An analysis based on information concerning occupation and marital status for a random sample of men examined for Selective Service showed that the prevalence of syphilis varies widely among different occupational groups. It also showed that in any occupation group the prevalence of syphilis is substantially higher among single white men than among married white men, but the differences between single and married groups among nonwhites was small.

The analysis was based on the results of serologic tests for syphilis performed on 531,236 Selective Service registrants who constituted a 20 per cent sample of the men examined from January 1 through May 31, 1945. Blood tests were tabulated according to age, race, marital status, and eleven broad occupational groups.

The prevalence of syphilis among single white men ranged from 1 to 2 per thousand for 17-year-old men in each occupational group to approximately 30 per thousand for the 37-year-old men in the professional group, 50 per thousand for proprietors, 45 per thousand for clerical, 45 per thousand for salesmen, 80 per thousand for craftsmen, 80 per thousand for operatives, 85 per thousand for service workers, and 90 per thousand for laborers.

The prevalence rates for married white men were 25 to 50 per cent lower than for single white men in corresponding occupational groups. In general among the white men, the differences between the syphilis rates of single and married men were much greater than were the differences between occupational groups, and these differences were least in those occupational groups having the highest syphilis rates.

Among Negro men a tendency for higher prevalence rates among the less skilled occupational groups was apparent but not statistically significant, and no statistically significant difference between married or single groups could be demonstrated.

The rates for the several occupational groups of Negro men ranged from about 20 per thousand among 17-year-old single Negroes in the more highly skilled occupational groups to more than 300 per thousand among 37-year-old Negro men in unskilled groups.

Prevalence rates for students were lower than for other groups on the whole. The authors conclude that undoubtedly there is a correlation between occupation and the prevalence of syphilis, but that this does not imply a casual relationship; except among the highly trained and the completely unskilled, cultural patterns probably have far greater weight, which may in part explain the differences that are constantly observed in the prevalence rates among different races.

The authors suggest further and more detailed studies to augment this analysis since the sample is fairly small, the population is limited to men subject to draft, and the occupational groups are broad and in several respects unsatisfactory for study in this particular field.

The Possibility of Predicting the Future Needs in Venereal Disease Control. A Study of the Effects of Mobilization on the Case Load in District of Columbia Clinics. George C. Ruhland, Frederick G. Gillick, and Ben D. Chinn, Journal of Venereal Disease Information, Washington, 26:222-229 (Oct.) 1945.

A study of the effect of mobilization and the Selective Service blood-testing activities on the age distribution of syphilis cases admitted to public clinics in the District of Columbia was made by the authors in an attempt to ascertain and make provisions for the problems of diagnosis and treatment that are arising with the changing conditions of demobilization and reconversion.

The study was based on tabulations of all cases of syphilis admitted to clinics from January 1, 1940, through April 30, 1943, for which the following information was known: race, sex, age, diagnosis, and month and year of admission. There were 26,870 such cases, comprising 1,471 white men, 1,029 white women, 12,045 Negro men, and 12,325 Negro women. The majority of the patients had passed the early stages of the disease. Of the total, only 3,643 were admitted with primary or secondary syphilis.

During the period of the study there was a steady increase in the total number of patients admitted. Changes in the age distribution of all race, sex, and diagnostic groups closely followed the patterns which could have been expected from consideration of the changing Selective Service regulations and local control activities. This indicates that analysis of local conditions will enable alert health authorities to predict and prepare for changes in problems of control.

The authors suggest that during the period of demobilization there will be much turnover among the individuals composing the population. The proportion of cases found among young men, which has been very low of recent months, will undoubtedly increase. All these factors indicate an increasing need for venereal disease control activities, especially those having to do with case finding. Planning is necessary.

*Abstracts of articles appearing in *The Journal of Venereal Disease Information* (formerly *Venereal Disease Information*), prepared by the Venereal Disease Division, U. S. Public Health Service.

DEATHS*

Dr. Pat Biscoe died suddenly of heart disease at his home in Houston, Texas, on October 16, 1945.

Dr. Biscoe was born January 26, 1895, in Benoit, Miss., but grew up in Arkadelphia, Ark. where he attended the public schools and Ouachita College. He was graduated from the medical department of the University of Arkansas, Little Rock, in 1926. Dr.

*An obituary ordinarily will not be published more than four months after date of death. Coöperation in reporting deaths of physicians and in furnishing appropriate biographical material promptly is solicited.

Biscoe served an internship at Charity Hospital in New Orleans, and then was house surgeon for the Illinois and Great Northern Hospital in Palestine, Texas, for one year before locating in 1929 in Houston, where he practiced until his death. He was a member of the staff of St. Joseph's Infirmary and other Houston hospitals.

Dr. Biscoe was a member of the State Medical Association and American Medical Association through the Harris County Medical Society. He was also a member of the Houston Academy of Medicine and South Texas District Medical Society. He was a Scottish Rite Mason, a member of the Shrine, and an Elk. He was a musician and played the saxophone with the Shrine and Elk bands.

Survivors include Dr. Biscoe's wife, Mrs. Juanita J. Biscoe; a son, Pat Biscoe, Jr.; and a daughter, Clara Ann Biscoe, all of Houston; and a brother, Dr. Gibbs Biscoe, Dumas, Ark.

Dr. Frank Branch Gooch, Houston, Texas, died October 8, 1945, of coronary occlusion.

Dr. Gooch was born August 17, 1888, at La Grange, Texas, the son of Dr. Joel M. and Helen E. Gooch. He received his academic education at Texas Agricultural and Mechanical College, Baylor University, and the University of Texas. His medical education was obtained at Tulane University, where he was graduated in 1916. He practiced in Temple until the outbreak of war, during which he served as a lieutenant in the Army Medical Corps. He then resumed practice in Matagorda, moving to Houston in 1921.

DR. FRANK BRANCH GOOCH

Dr. Gooch was a member during his professional career of the State Medical Association and American Medical Association, first through the Bell County Medical Society and then through the Harris County Medical Society.

Dr. Gooch was married October 23, 1916, in New Orleans to Miss Margaret Elizabeth Jackson, who preceded him in death August 7, 1937. He is survived by one son, Dr. Frank B. Gooch, Jr., who is now a captain in the Army Medical Corps, and one brother, Roy B. Gooch, Temple.

Dr. John Henry Erwin, Bandera, Texas, died September 20, 1945, at Legion, Texas, following a cerebral hemorrhage.

Dr. Erwin was born February 22, 1876, at Kaufman, Texas, the son of Henry and Nancy (Spikes) Erwin. He attended the schools at Whitewright, Texas, and Louisville, Ky. His medical education was received at Vanderbilt University, from which institution he was graduated in 1898. He began practice in Tolosa, Texas, remaining in Kaufman County until 1910, when he moved to Dallas. He operated a drug store there until 1917, at which time he entered the Medical Reserve Corps of the Army, serving with the rank of major. From 1921 to 1932 Dr. Erwin practiced at Bandera. He then was employed by the federal government in the Civilian Conservation Corps. During 1943 and 1944 he was with the State Health Department as director of the Jasper-Newton Health Unit, resigning several months ago because of ill health.

Dr. Erwin was for many years a member of the State Medical Association and American Medical Association. He was also a member of the county medical societies where he resided. He was president of the Kerr-Kendall-Gillespie-Bandera Counties Medical Society in 1931-1932 and secretary of the Jasper-Newton Counties Medical Society in 1944. He was health officer of Bandera County from 1925 until 1932. He was a member of the Baptist Church.

Dr. Erwin was married in Dallas, April 4, 1914, to Miss Annie L. Golden, who survives. He is also survived by two sisters, Mrs. Tex E. Armstrong, Dallas, and Mrs. Bert Nash, Kaufman.

Dr. Buford A. Russell, of Sherman, Texas, died at a local hospital June 15, 1945, following an illness of several weeks.

Dr. Russell, son of Mr. and Mrs. John A. Russell, was born August 17, 1887, at Decatur, Ala. He was graduated in 1912 from Birmingham Medical College, which later became a part of the University of Alabama. In 1913 he began practice at Southmayd, Texas, leaving there to enter the Army Medical Corps in 1917. Following the war, Dr. Russell located in Sherman, where he remained until his death.

DR. BUFORD A. RUSSELL

Dr. Russell was throughout his professional career, with the exception of the period of his military service, a member of the State Medical Association and American Medical Association through the Grayson County Medical Society. He was a member of the staff of the Wilson N. Jones Hospital in Sherman, for several years health officer for Grayson County, and at the time of his death city physician for Sherman. He was a member of the Christian Church, Masonic order, Odd Fellows, and Knights of Pythias.

Dr. Russell was married June 7, 1914, to Miss Clara Faye Etter, who survives. Also surviving are two sons, Buford A. Russell, Jr., Sherman, and James E. Russell, U. S. Navy; a daughter, Mrs. Clara Faye Bond, Sherman; his mother, Pampa; two brothers, Sam Russell, Amarillo, and Irving Russell, California; and four sisters, Mrs. L. C. Bailey and Mrs. H. R. Snow, Pampa; Mrs. F. D. Savage, Dallas; and Mrs. Luna McKelvey, Decatur, Ala.

Dr. Rogers William McKean, Fort Worth, Texas, died October 7, 1945, of cirrhosis of the liver in a hospital at Gladewater.

Dr. McKean, son of the late Dr. J. C. and Emma (Rogers) McKean, was born in Lometa, Texas, in 1888. He received his academic education in the schools at Lometa, and at Texas Christian University, Fort Worth. He was graduated from the medical department of Texas Christian University in 1917, and practiced about a year in Fort Worth before entering the Medical Corps of the Army, in which he served as a lieutenant in 1918 and 1919. He then returned to Fort Worth to resume civilian practice where he was a resident until his death.

Dr. McKean had been since 1918 a member in good standing of the State Medical Association and American Medical Association, through the Tarrant County Medical Society. For the past four years he had served Tarrant County Medical Society as chairman of the industrial relations committee. He was a Baptist, a Mason, and member of the Shrine. He had held a commission in the Medical Reserve Corps of the Army since World War 1.

Dr. McKean was married in 1908 to Miss Bertha Hightower, of Lometa. He is survived by his wife; a son, Major James Nolan McKean, U. S. M. C., Northfield, Minn.; a daughter, Mrs. Don Scrivner, Fort Worth; his mother; three brothers, Dr. J. C. McKean, Gladewater; Max McKean, Pampa; and Weir McKean, California; one sister, Miss Pauline McKean, Fort Worth; and one granddaughter, Miss Sherry Scrivner.

Dr. John Adams Stanfield, Fort Worth, Texas, died in a Fort Worth hospital November 4, 1945.

Dr. Stanfield was born November 30, 1894, in Fort Worth. His academic education was received in the University of Texas, and his medical education at Vanderbilt University, Nashville, Tenn., from which he was graduated in 1920. He served an internship at the Harris Hospital and Clinic in Fort Worth, and then continued to practice in Fort Worth until the fall of 1935, at which time he was forced to retire because of coronary thrombosis.

DR. JOHN A. STANFIELD

Dr. Stanfield was throughout his professional career a member of the State Medical Association and American Medical Association, through the Tarrant County Medical Society. In 1937, he was elected to honorary membership in the State Medical Association. He was a Mason and a member of Phi Chi medical fraternity. He was very active in the Isaac Walton League, serving that organization as president of the national society and also as president of the local chapter. He wrote extensively on the preservation of fish and wildlife for magazines, and was instrumental in founding protective measures on behalf of game animals and fish. He had hunted in Canada, Wyoming, Montana, and other areas.

Dr. Stanfield is survived by his wife, whom he married in 1930, and by a daughter, Mrs. H. L. Woodard, of Chicago, California, and Fort Worth.

Dr. James Joshua Terrill, Dallas, Texas, died October 10, 1945, at his home of tuberculosis complicated by myocardial failure.

Dr. Terrill, the son of Reuben W. and Anne Elizabeth Terrill, was born in 1877 in Randolph County, Mo., but soon moved with his parents to Texas. He attended the public schools in Denton, Texas, and Terrill College at Dechard, Tenn. His medical education was obtained in the Medical Department of the University of Texas, from which he was graduated in 1902. He served an internship at the John Sealy Hospital, Galveston, and was then appointed instructor in pathology in the Medical Department of the University of Texas, serving in that capacity until 1907, when he became professor of pathology. In 1913 he became pathologist at Scott and White Clinic, Temple. In 1917 he moved to Dallas and established the Timberlawn Sanitarium, remaining co-medical director of that institution until his death. He was also professor of neuropsychiatry at Baylor University College of Medicine until 1928, when he was made professor emeritus. After the establishment of Southwestern Medical College in Dallas he was made professor emeritus of neuropsychiatry at that institution.

DR. JAMES J. TERRILL

Dr. Terrill had been continuously throughout his professional career a member of the State Medical Association and American Medical Association, first through the Galveston County Medical Society and later through the Bell and Dallas County Medical Societies. He served the State Medical Association as chairman of the Section on Pathology in 1908 and again in 1913, and had been president of the Dallas County Medical Society. He was also a member of the Southern Medical Association. He was a Mason and a deacon in the Baptist Church. Until his health failed he taught one of the Southwest's largest Sunday school classes, the Baraca Class at the First Baptist Church in Dallas.

In 1905 Dr. Terrill was married in Galveston to Miss Laura Dodge, of Tyler, who survives. He is also survived by three sons, James E. Terrill, of the Navy, and Allen J. Terrill and Dr. Robert J. Terrill, both of Dallas; and two sisters, Mrs. John A. Lomax, Dallas, and Mrs. J. S. Stover, Eureka Springs, Ark.

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

The 1946 Annual Session of the State Medical Association of Texas will be held May 6, 7, 8, and 9, at Galveston, in accordance with the decision of the Executive Council. The Council accepted the invitation again unanimously extended by the Galveston County Medical Society after restrictions were lifted by the federal government.

The Hotel Galvez will be headquarters for the Association. The House of Delegates will be the only part of the Association proper to meet on May 6, which is Monday. All of the related organizations which customarily meet conjointly with the Association will hold their meetings on this day. The General Meetings, sessions of six of the scientific sections, the House of Delegates, President's Reception and Ball, Memorial Services, and the scientific and technical exhibits will be housed in the Galvez.

The Buccaneer Hotel, just two blocks away, on the famous Seawall Boulevard overlooking the Gulf of Mexico, will be headquarters for the Woman's Auxiliary. Two of the eight scientific sections will hold their meetings there also.

In fact, all arrangements made for the 1945 Annual Session, which had to be cancelled because of the war, have been graciously again made available.

This announcement is made not only to pass on information to members who will be keenly interested in making plans to attend the meeting, but to call to the attention of all who would like to take part in the program, the need of doing something about it promptly.

Any member of the Association who has a paper he would like to present at the Annual Session should at once offer his paper to the appropriate Section officers. Such offers will be highly appreciated, as Section officers are freighted with the highly important task of compiling their programs in a much shorter period of time than is ordinarily available. Usually the Annual Session program is completed and closed by the middle of January of the year in which it is to be presented. No doubt more time will be given Section officers this year, but there should be no delay in offering papers, if places are to be secured.

The names and addresses of the Section officers for the 1946 Annual Session are given here for the convenience of members who wish to communicate with them regarding prospective papers:

SECTION ON MEDICINE

Dr. W. H. Potts, Jr., Chairman, Box 28, Dallas.
Dr. Edwin L. Rippy, Secretary, 3622 Fairmount Ave., Dallas.

SECTION ON SURGERY

Dr. R. Wilson Crosthwait, Chairman, 1724 Austin Ave., Waco.
Dr. H. Walton Cochran, Secretary, Medical Arts Building, Dallas.

SECTION ON OBSTETRICS AND GYNECOLOGY

Dr. Robert A. Johnston, Chairman, 4115 Fannin, Houston.
Dr. John D. Weaver, Secretary, 4409 Avenue S, Galveston.

SECTION ON EYE, EAR, NOSE, AND THROAT

Dr. V. R. Hurst, Chairman, 315 North Center St., Longview.
Dr. Burbank Woodson, Secretary, Woodson Hospital, 312 West Avenue G, Temple.

SECTION ON RADIOLOGY AND PHYSIOTHERAPY

Dr. Tom B. Bond, Chairman, Medical Arts Building, Fort Worth.

Dr. Glenn D. Carlson, 1221 Medical Arts Building, Dallas.

SECTION ON PUBLIC HEALTH

Dr. Victor E. Schulze, Chairman, 234 W. Beauregard Ave., San Angelo.

Dr. T. E. Dodd, Secretary, care of State Health Department, Austin.

SECTION ON CLINICAL PATHOLOGY

Dr. John F. Pilcher, Chairman, Medical Professional Building, Corpus Christi.

Dr. William N. Powell, Secretary, Scott and White Clinic, Temple.

SECTION ON PEDIATRICS

Dr. M. C. Carlisle, Chairman, 1410 Austin Ave., Waco.

Dr. Robert L. Moore, Secretary, 3403 Hall St., Dallas.

Also, all who may wish to present scientific exhibits or to offer motion pictures to the motion picture exhibit, should communicate at once with Dr. X. R. Hyde, Medical Arts Building, Fort Worth, Chairman of the Committee on Scientific Exhibits of the State Medical Association.

This will be the first full dress Annual Session of the Association since 1942, when the nation was compelled to abandon all but the most necessary activities and gear its production and the collective energies of all its people to a global war. Since that titanic conflict has been successfully concluded, we can again march forward, with meetings devoted to scientific progress and convivial associations, which have made the United States the foremost nation in medicine in the world today.

The Galveston Annual Session in 1946 will make history of the right sort.

Medical Care of Veterans, which in the very recent past has been subjected to caustic criticism on a nationwide scale, is assured of rapid improvement to the point where our veterans may be certain of receiving the finest medical service, under the reorganization program being effected by Major General Paul R. Hawley, recently appointed Acting Surgeon General of the Veterans Administration.

General Hawley, after his appointment to this office, promptly sought the aid of organized medicine in the solution of the problem of a high type of medical care for veterans. He has made two outstanding addresses to representatives of American medicine on what he proposes to do, and in each instance has asked the coöperation which will be needed from the medical profession. The first of these addresses was made at the Public Relations Conference conducted by the Council on Medical Service and Public Relations of the American Medical Association at Chicago, October 19 and 20, and attended by at least two specially appointed representatives from each state medical association in the United States. The second address was to the House of Delegates of the American Medical Association meeting in Chicago, December 3 to 5, which body is wholly representative of American medicine at its best. In each instance, the medical audience was captivated by the sincerity, earnestness, broad vision, and fearlessness of General Hawley in stating his plans to provide the best in American medicine for our veterans.

General Hawley points out that regardless of all the scathing criticism aimed at the Veterans Administration, the organization has many fine doctors and some fine hospitals and clinics.

The present problem is twofold: a sufficient number of adequately staffed hospital beds and a sound program of out-patient care. If the Veterans Administration failed to give proper care to four million veterans after the last war, with a full time corps, how can it possibly be expected to care for the anticipated twenty million veterans from the recently concluded war? While the Veterans Administration will continue to need a full time corps of doctors for administrative purposes, the problem can be met only by the part time service of private practitioners of the country, General Hawley points out.

Therefore, the Veterans Administration, under the program of General Hawley, will attempt to prevent the building of new veterans hospitals in locations for political expediency and insist that they be located where the services of private practitioners may be utilized on a part time or fee basis. Every effort is being made to secure the use of beds in private hospitals on contract basis, but with little success. This is why new veterans hospitals are being built and will have to be built to insure adequate and proper hospital care for veterans. Such hospitals will also offer residencies for returning medical officers who desire hospital work before resuming private practice.

The larger problem is the out-patient care of the veterans. Under the present law, women veterans are entitled to out-patient care at whatever expense for any disability, service-connected or not. Male veterans are entitled to out-patient care only for service-connected disability.

General Hawley's program proposes to provide a system by which every reputable physician in every community in the United States may be designated by the Veterans Administration to render out-patient care,

permitting, in so far as possible, the veteran to choose his own physician as does any other person in the community.

Elsewhere in this number of the JOURNAL (p. 483) is a brief description of how the proposed out-patient care program of General Hawley is being successfully conducted in Monmouth County, New Jersey, with a coöperative county medical society. It is hoped that a similar program adapted to each county or state may be put into operation as promptly as possible in every part of the United States. General Hawley hopes that arrangements may be made with state organizations. Already such arrangements have been perfected with Michigan and Kansas.

The House of Delegates of the American Medical Association has placed its wholehearted stamp of approval on the splendid program of General Hawley.

General Hawley is a confirmed and fearless advocate of private medicine as the supreme method of rendering the finest type of medical care. In his concluding remarks to the House of Delegates of the American Medical Association he laid down a challenge which we know he had confidence American medicine would meet in proving that an unregimented medical profession can solve any problem of medical care if given the opportunity. That challenge follows:

"How better can we establish this great organized profession in the esteem of the people of this country than for us together to attack this great public problem and show our people that a free and unregimented and ungoverned profession can solve the problem and that it is not necessary for the government to tell the medical profession how to run its business? I am just as much interested as you are in keeping the government out of the medical business. I am committed to only one principle, that the veteran shall receive the best in American medicine. I can't support any program which denies him the best in American medicine, and I am quite sure it will be a long time before we find the best in American medicine, in any quantity at least, in other than the civil practice of medicine.

"If I am not permitted to bring the best in American medicine to the veteran, I shall withdraw at once from the program. I shall neither let down the veteran nor betray our own great profession."

We, too, have confidence that American medicine will give General Hawley the coöperation needed to make his program succeed.

Raising the Standards of Laboratory Medicine in Texas is and has been the goal of Texas pathologists and the Texas State Board of Health for many years. A mutual endeavor to reach that goal was started at a special meeting of the Texas Society of Pathologists held in Austin on August 12, 1938, at the request of Dr. George W. Cox, State Health Officer. The purpose of that meeting was to establish a plan for the approval of clinical laboratories in Texas. Members of the Society were asked to nominate a committee of seven pathologists, including the Director of the State Health Department Laboratories, to direct a program in which laboratories of the state might be appraised for approval by the State Board of Health, which also would have the authority to approve the committee selected, since it would be representing the Board.

The first committee appointed was given the name of the Texas Board of Standardization of Clinical Laboratories. In 1941, the name of the committee was changed, at the request of the committee, to the Committee for the Standardization of Clinical Laboratories.

Since the organization of the Committee in 1938, outstanding evaluation studies have been conducted each year on the serodiagnosis of syphilis by voluntarily participating clinical laboratories in Texas. Since 1941, the standard requirements for approval have been those outlined by the National Committee for Evaluation Studies for the Serodiagnosis of Syphilis. In the first four evaluation studies, whole blood specimens from known normal and syphilitic persons were submitted, and laboratory results were evaluated in the light of the clinical findings of the persons from whom the specimens were taken. Later, because of reports of an excessive number of hemolyzed specimens in the studies, specimens of sterile sera were submitted in place of whole blood.

The coöperation of the distinguished authors of serologic tests, all of whom are world authorities, including Dr. Reuben L. Kahn, Dr. John A. Kolmer, Dr. Benjamin S. Kline, Dr. Harry Eagle, and Dr. W. A. Hinton, in the evaluation studies was sought, and they agreed to examine specimens as control laboratories.

It is with pride that announcement is made here that Texas tied for first place in 1945, in the National Evaluation Studies. Much of the credit for this splendid performance is given by the Committee to the work done by Dr. S. W. Bohls, who has served for many years as Director of the State Department of Health Laboratories, and it is with great regret that announcement is made here of Dr. Bohl's recent resignation to enter a more lucrative field in his specialty of pathology. The good will of Texas medicine is due him for his outstanding work in developing the Laboratories of the State Department of Health to their present highly efficient status.

The Committee has urged the State Board of Health to choose as Dr. Bohl's successor a clinical pathologist capable of not only maintaining but continuing to raise laboratory standards in Texas.

To insure continued advancement in the raising of standards the Committee has made the following recommendations to the State Board of Health:

1. Maintenance of adequate machinery for the continuation of laboratory evaluation studies of syphilis, water, and milk.
2. Notification of all laboratories in the state that evaluation studies will be conducted, and that those laboratories meeting minimum requirements will be publicly approved.
3. Expansion to include bacteriological, parasitological, and hematological evaluation studies.

The Committee plans to promote an educational campaign to give to the medical profession of Texas a better understanding and appraisal of laboratory aids in diagnosis. To accomplish this purpose it proposes to continue the serological evaluation studies, and to initiate refresher courses in diphtheria and dysentery laboratory diagnosis. In this work the Committee will seek the coöperation of the district and county medical societies of the State Medical Association, as well as the other special medical organizations in Texas.

Texas medicine is fortunate in that its pathologists are eager and competent to assume leadership and direction in needed, continued education of the medical profession in the important field of laboratory medicine.

The American Medical Association House of Delegates met in regular session, in Chicago, December 3, 4, and 5, 1945, with 170 members present out of a possible 175. Originally scheduled as a four-day meeting, through hard and fast work the business before the House was satisfactorily dealt with in three days. This editorial is an unofficial report of the meeting by our Delegates. It will be recognized that the report cannot be, in the nature of things, a full and detailed account of what happened, and as it happened. Those who are sufficiently interested to do so, should read the Transactions of the meeting, which are published in full in the December 15 and December 22, 1945, numbers of *The Journal of the American Medical Association.* The Reports of Officers, Councils, and Committees, in so far as they could be published at the time, appear in the October 20, October 27, and November 3, 1945, numbers of *The Journal.* Supplementary Reports will be found in the Transactions already referred to.

We think it worthy of mention that the scope, importance, and accomplishments of this meeting of the House of Delegates of the American Medical Association were great. Because of the delay in holding the meeting, there was an accumulation of highly important problems, many of which were "must" problems, while all of them were pressing and pertinent. Rarely is it so that the decisions of such a large legislative body of such widespread and distinguished membership meet with unanimous approval of its participants, and such probably was not the case in this instance, but it is our opinion that never did so many important decisions meet with such uniform approval as was the case here. There was a bit of dissatisfaction in one instance, and there will be a hangover as a result, but possibly the matter is not highly important at that. There will be discussion of this particular issue later on in this report. Speaking of the House of Delegates, President-Elect Dr. Roger I. Lee said, "To be sure, like all democracies it is not given to hairtrigger decisions. Yet a study of its decisions leads, I believe, to the inescapable conclusion that they are sound and that the decisions are in step with the times and generally carefully evolutionary rather than recklessly revolutionary."

The business of the session of special interest to the medical profession of the country was that pertaining to public relations, federal legislation, military matters, medical care, socialized medicine, care of veterans of the recent and former wars, procedures and policies of the administrative offices of the Association, and a number of items of lesser scope which are of sufficient importance to discuss, and most all of which will be discussed here.

We were represented at the meeting by Drs. H. R. Dudgeon, of Waco; B. E. Pickett, of Carrizo Springs; Edward H. Cary, of Dallas; Holman Taylor, of Fort Worth; and F. J. L. Blasingame, of Wharton. Three of our delegates drew Reference Committee assignments. Dr. Dudgeon sat with the Committee on Credentials; Dr. Blasingame served with the Committee on Post-War Planning, and Dr. Pickett was a member of a newly created Reference Committee on "Medical Care of Veterans."

One of the important and far-reaching decisions made at the meeting was to change the By-Laws of the Association so as to provide for two meetings of the House of Delegates per year, instead of one, as at present, unless there should appear to be some good reason why such a change should not be made. Amendments to the By-Laws of the Association will be prepared and introduced at the next annual meeting of the House of Delegates.

Dr. Harrison H. Shoulders, of Nashville, Tennessee, upon the request of numerous members of the House of Delegates, resigned his office as Speaker in order that he might be nominated for the Presidency of the Association. At the proper time he was unanimously elected as President-Elect. This is neither the time nor the place to discuss the attainments of Dr. Shoulders which qualify him for the high office he has thus assumed. Suffice it to say that he has been on the firing line for American medicine for lo these many years, more years than a fellow likes to think about sometimes, and has fought valiantly in many important positions, including membership in the American Medical Association House of Delegates from 1930 to 1938, at which time he was promoted from Vice-Speaker to Speaker of the House. He was Secretary-Editor in Tennessee from 1927 to 1945. He is 59 years of age, and knows what it is all about. Dr. Shoulders is not merely an executive. He is a surgeon of distinction and ability. A reading of the messages of Dr. Shoulders to the House of Delegates, as Speaker of the House, will lead to the conclusion that we may expect great things from him as President of the great American Medical Association.

Dr. Roger I. Lee, Boston, assumed the office of President, and Dr. W. R. Molony, Los Angeles, was elected Vice-President. Dr. Olin West was re-elected Secretary. Dr. R. W. Fouts, Omaha, Vice-Speaker of the House, was elected Speaker, to succeed Dr. Shoulders, and Dr. Francis F. Borzell, Philadelphia, was elected Vice-Speaker.

Dr. Stanley R. Seeger, of Texarkana, Texas, was placed in nomination for Trustee, to succeed to one of the two positions now held in the Pacific Coast area. The race was close, but Dr. Seeger lost, and the great Southwest again goes without representation on the Board of Trustees, whereas other sections of the country appear to be rather well represented. This is not particularly in criticism. The By-Laws do not require the election of a Trustee on a geographical basis.

Dr. George Richard Minot, Boston, received the Distinguished Service Award, being chosen over Dr. Isaac A. Abt and Dr. A. J. Carlson, both of Chicago. This is the highest honor the Association can extend a doctor for scientific contribution to medicine. Dr. Minot earned distinction and worldwide recognition for his studies in the cause and methods of control of pernicious anemia.

The next annual meeting of the Association will be in San Francisco, July 1-5, 1946.

One of the most interesting and at the same time really important items of business before the House at this meeting was represented by a resolution introduced by a California Delegate, which resolution sought to require that all employees of the Association who are not specifically employed on a part-time basis shall be required to devote their full time to the activities of the Association for which doubt the resolution was genuinely for the purpose they are employed and not engage in outside activities from which they derive financial income. No stated, but neither is there any doubt as to its further purpose. It was so considered by the House of Delegates, and the fight was waged along that line. Following extended discussion in executive session, the resolution failed of adoption, the idea being that the matter be left to the discretion of the Board of Trustees, in which body there was expressed the fullest confidence by the House. It seemed to be the opinion of most of the Delegates that if and when the activities of any whole-time employee of the Association get out of bounds or go off on tangents, or fail to serve the purpose of American medicine, something will be done about it.

Another resolution from California would direct that the Council on Medical Service and Public Relations, so recently established, become the sole spokesman for American medicine, and that this Council be given whatever funds it may require for this and related purposes. The resolution contemplates that the Council employ a full-time executive, with an adequate staff. Still another resolution from California would require that the Council on Medical Service and Public Relations serve as "the sole agency for presentation of the attitude of American Medical Association relative to matters in which the organized profession should or must make representation to the people or to the government." There seems to be a distinction between the two resolutions. Certainly they together cover the entire field, and were they adopted, no officer, council, or committee of the Association could get out on the limb, except through and by the advice and consent of the Council on Medical Service and Public Relations. This procedure would certainly make of this Council a body with over-all authority, and it was so considered by the Reference Committee which took the problem up for careful study, and by the executive session of the House of Delegates which decided the matter.

The three resolutions above mentioned were, in fact, dealt with as a group by the Reference Committee having them in charge. The vote was 106 against and 60 for the resolutions. The Reference Committee had reported that the Council on Medical Service and Public Relations had functioned notably, had enjoyed the fullest confidence and financial support of the Trustees, and had been authorized to employ the necessary public relations force.

Speaker Shoulders, in his address to the House of Delegates, said that "The soul of medicine is not of recent conception. It appeared when medicine began as a profession. The ideals and principles to which young physicians dedicated themselves in the time of Hippocrates and the original Code of Ethics could have had no other origin." He referred impressively to this train of thought throughout his address. It is too bad that we cannot get the idea over to the public, or to any too great proportion of the medical profession itself. In this day and time all the public can think about in this connection is the economics involved, and the advantages to the groups concerned. People apparently don't want to believe that there is such idealism in the world as that represented by medicine and medical ethics. A campaign to put over this idea would alone more than pay the cost and justify the trouble of our public relations efforts, state and national.

The recently formed Council on Medical Service and Public Relations of the American Medical Association has this as one of its objectives, and according to its very fine report, it has made a good start. Indeed, it has accomplished signal results. The function of this Council has evidently been mis-

understood by many of our members, and even by members of the House of Delegates of the American Medical Association, which set the Council up. It would be well to read the conception of this Council, of its duties, objectives, and prerogatives, as published in *The Journal of the American Medical Association.* Apparently some of those who have been seeking to bring about legislation in the House of Delegates of the American Medical Association concerning this matter had not read this report. According to our opinion the Council has taken hold vigorously, and is going ahead rapidly with its office in Washington, and with its tie-in with the various groups in Chicago. It has joined up with state medical associations throughout the country, and the machinery thus set up appears to be working effectively. A resolution from Ohio was introduced in the House of Delegates, calling for "sustained leadership of state medical associations in their public relations programs, especially through the example of an immediate and outstanding program of medical public relations on a national level, employing newspapers, commercial radio and movies, and all other modern mediums to bring medicine's glorious story to the American people." Another resolution was introduced, this one from Pennsylvania, calling upon the Woman's Auxiliary to help in the matter. Both resolutions were warmly supported and unanimously adopted. We have already discussed the resolution from California with regard to this Council and its service.

A resolution from Illinois called upon the Council on Medical Service and Public Relations to take the initiative in forming a so-called National Health Congress, such congress to undertake to bring to the people of this nation the complete benefits of modern medical-dental service, and the finest hospital facilities, through voluntary, non-profit health plans, and any other feasible voluntary effort. This idea met the warm approval of the House of Delegates, and thus this Council begins to reach into the field it was intended to cover, not as strictly a scientific and public health agency of the Association would cover them, but in such a way as to make the people understand. There is a distinction between this sort of service and that of an over-all, compelling group, whether committee or council. The suggestions of the Council with respect to health legislation of peculiar and direct benefit to the public was referred to the Board of Trustees. They involved too much detail for the House of Delegates to undertake specific action.

The Bureau of Legal Medicine and Legislation covered, in a rather extensive and informative manner, the more important measures pending in the Congress, including the E. M. I. C. program, and its extension into the realm of the ridiculous; the hospital construction act; the Wagner-Murray-Dingell bills; and the proposal to issue federal licenses to practice medicine across state lines, to mention just a few of them. The Board of Trustees reported specifically upon many of these measures, presumably using as its source of information the Bureau of Legal Medicine and Legislation, and the several other groups having to do with such matters. These are too numerous and too intricate for an editorial discussion. President Truman's message to Congress covering his public health legislative program was analyzed and commented upon by a reference committee of the House of Delegates. The first proposal, that federal aid be extended to communities for the construction of hospitals where needed, was, of course, approved, but it was pointed out that the Hill-Burton bill, already and freely discussed in medical and lay circles, provided this same assistance. The extension of maternal and child health service along the lines of the now notorious E. M. I. C. program, wherein the child may receive the benefits of free medical and hospital service until it attains its majority at the age of 21, was vigorously disapproved. It was called "an insidious attempt to turn over to the federal government functions that are definitely those of the medical profession." The same reference committee commended the suggestion that the Children's Bureau be removed from the Department of Labor to that of the United States Public Health Service. The idea of transferring the Children's Bureau from the Department of Labor to the Federal Security Agency was approved as an expedient and "until such time as the Congress creates a national department of health with a qualified physician as its director with cabinet status."

The suggestion of President Truman concerning the development of a National Research Foundation was by-passed with insistence that the Magnuson bill, now pending in Congress, was better. This measure would place the control of the National Research Foundation under a scientific board of directors rather than under an individual director to be appointed by the President. The suggestion of President Truman that compensation should be extended by the government for the loss of earnings due to sickness in connection with any health program appeared to be acceptable. It was pointed out that the House of Delegates has heretofore approved the idea. The creation of a federal system of compulsory sickness insurance, as suggested by President Truman, had already been provided for in the Wagner-Murray-Dingell bills. In spite of the statement by President Truman that his suggestions would not in any sense provide for the socialization of medicine, the reference committee having the matter in hand recommended that the statement in *The Journal* (Dec. 1, 1945) be endorsed as the policy of the Association; it was approved by the House of Delegates. This statement follows: "No one will ever convince the physicians of the United States that the Wagner-Murray-Dingell bill is not socialized medicine. By this measure the medical profession and the sick whom they treat will be directly under political control. By this measure the great system of private hospitals and community hospitals that have grown up in our country will depend for their continued operation on funds paid to them by a federal government agency. By this measure the philanthropic efforts for the care of the sick, which have been the pride of our nation, will be forever deterred. Through this measure competent young men who would enter the medical profession will be forced to seek other fields of action still remaining under our democracy which still permit the exercise of individual initiative and freedom of thought and action. By this measure doctors in America would become clock watchers and slaves of a system. Now, if ever, those who believe in the American democracy must make their belief known to their representatives, so that the attempt to enslave medicine as first among the professions, industries or trades to be socialized will meet the ignominious defeat it deserves."

President Kretschmer, in his address to the House of Delegates with reference to the regimentation of medicine, said that "regimentation always leads to totalitarianism, and it always begins under one guise or another with medical practice. It is insidious in onset and progressive in its course, and the fatal result is regimentation of labor and business as well as of the practice of medicine. Those most vociferous in favor of regimented medicine formerly pointed with pride to Germany as a country which was the furthest along with social legislation. Since it has led to totalitarianism and the complete collapse of Germany, they no longer hold her up as an example of regimentation of medical practice."

One of the special committees, reporting upon the

trend towards socialized medicine, quoted doctors as saying, "This is inevitable and we might as well get on the band wagon and go along with it. We cannot stop it." The committee gave as its opinion that the only inevitable feature of the march towards collectivism is the determination of the small lay group which wants to collectivize. That idea is worthy of emphasis. We have been too long maneuvered into a defensive position in this connection, the idea being that a defense cannot win. It is true that a defense, meaning something that merely sits still, cannot win, but a defense which involves striking back can and generally does win.

Federal control of the practice of medicine under any and whatever terms was disapproved in so many words. It was the opinion of the House of Delegates that even medical research should not be under the control of the federal government. The financial assistance of the federal government, without the element of control by the government, was ruled the limit to which the government should go in connection with the practice of medicine, which matter is a prerogative of state governments. This matter was referred to in the health program of President Truman.

As a matter of direct interest in the development of the practice of medicine, along with other developments of these ultra-modern times, a constructive program has already been compiled and promulgated far and wide by the American Medical Association. It was submitted to the medical profession of Texas, and has been placed before the laity of the state to the extent possible under our limitations. This program contains fourteen points, the purpose of all of which is doubtless well known to our readers. It contemplates sustained production, in order that there may be proper living conditions; disease prevention, through public health organizations, official and voluntary; increase of hospitalization insurance; the development of voluntary sickness insurance plans, medical care and hospitalization for the indigent by local authorities, as contemplated by the Constitution and laws of our several states; surveys and federal aid to determine the need of hospital and medical facilities and to supply them; extension of information along these lines to the lay public; discharge of physicians from the Armed Forces, in order that there may be a more adequate supply of doctors for the lay public; increase of the availability for medical education, in order that there may be a continuous renewal of medical personnel; federal legislation to provide for the release to medical colleges of draftees who are entering the study of medicine; and finally, the postponement of consideration of revolutionary changes in the practice of medicine while so many physicians are still in the service and so many laymen yet remain to be discharged from the Armed Forces. It would seem that this program would appeal to all who are interested in the adequacy of medical service, and probably does or will. The fly in the ointment is that small group which is intent on socializing not only medicine, but every other activity in this country.

The problem of deferring medical students in order to insure a constant and satisfactory flow of physicians from medical colleges was considered a serious problem. It was recommended that telegrams favoring such deferments be sent to committees in Congress having to do with the matter, to the Office of War Mobilization and Reconversion, the director of Selective Service, the chairman of the Procurement and Assignment Service, the Secretary of War, the Secretary of the Navy, and the President of the United States.

A resolution from New Jersey would set up a permanent Conference on Medical Care, to operate in conjunction with, but entirely independent of such organizations as the American Medical Association, the Congress of the United States, the governmental agencies concerned with health service, and with the help of the President of the United States. Such a Conference would be given "powers of action to the end that the American people may be provided in our time with the best possible quality, quantity, availability and distribution of medical care." The resolution called for the appointment of representatives from the American Medical Association, and the whole proposition was dumped in the lap of the Board of Trustees.

A resolution from New York set up a number of principles to be followed in planning a national health program, among the suggestions being that there be established in the Cabinet of the President, a Secretary of Public Health and Medical Welfare, to be selected from the ranks of actively practicing physicians. The resolution would refer to the Secretary of Public Health and Medical Welfare all activities of the federal government pertaining to health and medical welfare. The resolution provided for scientific research, state loans for the expansion of hospitals and educational facilities along medical lines, the establishment of voluntary non-profit health care programs, coöperation with the Veterans Administration along the lines of the address to the present House of Delegates by Major General Hawley, and public information and educational service along the lines of public and private hygiene and sanitation. The state medical associations were called upon to adopt these principles on the state level. This resolution was grouped with others along the same line and left with the Board of Trustees.

A resolution which had been carefully compiled by a special committee of a conference just held with the Council on Medical Service and Public Relations was introduced and acted upon favorably. It called for the rapid and complete coverage of voluntary sickness insurance throughout the country, and the formation of a national group to coördinate them. This resolution is a necessary companion to the fourteen points referred to above, providing for a constructive program for medical care. A related resolution introduced by an Oklahoma delegate, covering more or less the ground of the others, would provide for the organization of state and national prepayment plans.

A resolution from the District of Columbia expressed some complaint as to the actual qualifications of specialists in the practice of medicine, and called for a survey of medical societies in the metropolitan centers of the United States to ascertain to what degree information as to the qualification of specialists has been compiled and made available to the public. The resolution recommended that this procedure be followed where something of the sort has not already been done. The House of Delegates ruled that it was purely a local problem and let it go at that.

It is interesting to note that the House of Delegates warmly endorsed the idea of giving terminal leave to medical officers being discharged from the service, with, of course, pay of rank, the idea being that thus medical officers re-entering private practice may have an opportunity to take training in hospitals or medical schools to fit them for the type of practice which they are going to take up. This is of interest to us because at the beginning of Procurement and Assignment Service, the same idea was expressed, in a different way, by several of those dealing with Procurement and Assignment matters in Texas, and the Eighth Corps Area. The suggestion received less than no consideration at that time. It is now being done, we believe, by all of the Armed Forces.

The early return to civilian practice by medical officers in the Armed Forces, and the prompt return of medical students to civilian life and their

studies, was called for by a resolution from Wisconsin. Similar resolutions were introduced from Michigan and West Virginia. In this connection, it may be said that the medical service of the Armed Forces has received the warmest praise and commendation by all in authority in such matters. President Dr. Roger I. Lee, in an address before the House of Delegates, called attention to many of the accomplishments of medical officers under trying and adverse circumstances. More than 60,000 physicians entered the Armed Forces during the war. Many of these were decorated for bravery and meritorious service; 409 died in the service, and 229 were reported killed in action. These are not final figures.

A Medical Corps is being organized in the Veterans Administration. This is the culmination of a policy advocated by the American Medical Association for many years, and with more emphasis recently. The address of Major General Hawley, who has recently taken over the medical service for the Veterans Administration, is referred to elsewhere herein, more or less in detail. General Hawley is the right man, in the right place, at the right time. Something is going to happen. A plan is being developed, as will be noted, whereby the medical profession locally will be utilized in the care of our veterans. A resolution from Wisconsin asked that the best possible medical care be provided for our veterans, but that this service be not involved in an attempt to socialize the practice of medicine in America. The resolution was adopted. The idea of General Hawley that all new hospitals to be erected for the care of veterans be located near medical centers, where any variety and quality of medical service may be easily and economically secured, was warmly approved, and it would appear that such policy is going to be followed, politics or no politics.

The House of Delegates continued its opposition to the extension of medical benefits to those veterans suffering from conditions obviously not service connected.

Suitable recognition of those of our members who worked so valiantly and so hard under the Procurement and Assignment Service was called for, and it was promised that the government would do something about it soon.

The Board of Trustees recommended that the House of Delegates authorize the appointment of a Committee on Military Service, the personnel of the committee to include four civilian physicians who served during the war, the objective of the committee to be the proper utilization of physicians in any national emergency.

A resolution was introduced from Wisconsin providing for a thorough study of the proper apportionment of physicians to civilian and military needs in time of war, in an effort to devise a workable program to cover military service in such time of stress, the study to be made by a Committee on Medical Preparedness, with financial support from the Board of Trustees. The matter was referred to the Board of Trustees, which is expected to appoint the committee.

A resolution from a Wisconsin Delegate would provide for the automatic license of medical officers who had served during the World War, such licenses to enable the recipients to practice anywhere in the United States. It was ruled that such matters came within the exclusive jurisdiction of the states, and that nothing could be done about it from the federal angle.

Concern over the loss of Fellowship by physicians entering military service during war-time was expressed and the problem received due consideration. It was desired to do something about it, but when it became apparent that Fellowship is based on membership in county medical societies and state medical associations, the problem was released to those organizations. From the discussion it appeared that most state medical associations had taken steps to protect the membership of those who had entered the Armed Forces during the war.

An effort was made to amend the Constitution and By-Laws of the American Medical Association so as to provide eligibility to Fellowship of physicians in the Service of the Veterans Administration. Decision was that if and when the presently contemplated reorganization of the medical service of the Veterans Administration is satisfactorily perfected, the requested recognition would be forthcoming.

A Committee on Rural Health Service has been acting with a similar committee from the American Farm Bureau and other similar groups now for a year. The committee has evidently accomplished a good deal along the lines of improving medical and hospital service for rural communities and has inculcated in the minds of laymen interested in the same matter, the proper concept of the practice of medicine. The committee was ordered to continue its service.

A resolution from Oklahoma condemned H. R. 525 and S. 1271 in their present form, which measures permit labor assemblies to undertake industrial hygiene activities now under federal and state public health agencies.

A resolution from New York provided for cooperation with labor in a national conference, in matters pertaining to health. The House of Delegates ruled that public industrial hygiene activities should reside in bureaus operated by health departments, and that there was no opposition to a conference with labor in any health matters.

The Judicial Council, in its annual report, gave extended consideration to the problem of cult practice, and reiterated the position of the medical profession on the Principles of Medical Ethics applying to such matters, and calling for a closer study of all principles of medical ethics by the medical profession generally. It was the opinion of the Judicial Council that most of the difficulties now plaguing the medical profession along these lines would be avoided thereby—at least their solution would be facilitated. It was strongly recommended that the Principles of Medical Ethics and the economics of medicine be adequately taught in all medical colleges. The idea was approved. It will be remembered that for some years, Baylor University College of Medicine, then at Dallas, did teach these two subjects. Whether they do so now is not known. The problem is certainly pressing.

A resolution proposing an International Congress on Tropical Medicine was introduced by a New Jersey Delegate. The idea was advanced by the American Academy of Tropical Medicine and other organizations interested in such studies. The resolution was revamped by the reference committee having the matter in charge. It approved the idea in fewer words, and provided that the Board of Trustees be authorized to appoint a member officially to represent the American Medical Association in such a conference.

At the meeting of the House of Delegates in 1944 a resolution was introduced providing for a "Board of General Practice." The resolution was somewhat ambiguous. It was referred to the Board of Trustees, and the Board of Trustees in turn referred the matter to the Advisory Board for Medical Specialists. At the present session a Delegate from Michigan introduced a resolution calling for the establishment in the American Medical Association of a Section on General Practice. A Delegate from Alabama introduced an amendment to the By-Laws, creating a new Section in the Scientific Assembly, to be designated as the "Section on General Practice."

The reference committee having the matter in hand, rearranged the section in the By-Laws concerned, so as to re-designate the Section on the Practice

of Medicine as the Section on Internal Medicine, and added a section to be known as the Section on General Practice of Medicine. The By-Laws were so amended, and hereafter there will be, in fact, a section for the general practitioner. Whether or not there will be a Board on General Practice remains to be seen, but some of the brethren are becoming a little peeved that the bedside doctor, who is trying to take care of things thereabout, is severely handicapped in many particulars because he cannot be a diplomate of a national board of some sort. He will probably get one in the course of time.

An amendment to the Constitution was submitted, and will lay over for a year. This amendment would increase the membership of the House of Delegates from the present 175 to 176, to care for a Delegate from the Section on General Practice of Medicine.

Changes in the By-Laws were also made requiring that titles for papers be in the hands of the secretaries of sections at least sixty days before the first day of the Scientific Assembly.

The Board of Trustees was instructed to prepare for wide dissemination, an illustrated booklet, outlining the benefits to animals and mankind of animal experimentation, in order to offset the continued agitation against animal experimentation, which the Board of Trustees advised is dangerous.

Resolutions pledging aid to the medical profession of the Philippine Islands were adopted.

There was considerable discussion of the problem of attracting the attention of medical students while they are still in college. The Board of Trustees thought it would be a good idea, and the House of Delegates agreed, but referred the whole matter to state medical associations, in some of which there will need to be rational changes in constitutions and by-laws, in order to provide for medical student memberships, which had been proposed.

At the instance of the Board of Trustees, it was decided that the One Hundredth Anniversary of the American Medical Association, which will occur in the year 1947, be celebrated at the Atlantic City meeting of the Association that year. It was decided that the Speaker should appoint a committee to have the matter in charge. The Speaker selected the following committee: Dr. E. R. Cunniffe, New York, chairman; Dr. Walter F. Donaldson, Pittsburgh; Dr. Thomas P. Murdock, Meriden, Connecticut; Dr. Thomas S. Cullen, Baltimore; and Dr. Warren F. Draper, of the U. S. Public Health Service.

A resolution from Wisconsin called for a study of nursing problems and education, and asked that the President of the American Medical Association appoint a committee to act jointly with committees on hospital and nursing personnel. The resolution was so amended as to refer the matter to the Council on Medical Education and Hospitals, advising that the Council should act in conjunction with nurses' organizations and others interested in the problem in deciding what should be done about it.

The indiscriminate use of the sulfonamides in syphilis was condemned in a resolution from the Section on Dermatology and Syphilology. The resolution was adopted.

The problem of interference with county medical society meetings by hospital staff meetings was solved by recommending that hospital staff meetings should be determined by the needs of the staff itself. Such meetings should be devoted to the review of the work of the hospital, discussions of results, reports on autopsies, pathologic studies, and such papers as pertain to the professional work of the hospitals themselves.

The National Physicians Committee was again endorsed in most commendatory language.

The Secretary reported that at the close of the year 1944, there were 124,595 members, which represented a gain in membership of 1,009 over the previous report. The Fellowship Roster carried 68,637 Fellows as of December 31, 1944, as against 70,269 on the same date the year before. The loss of Fellowship by many members entering the Armed Forces was responsible for most of this decline.

The Trustees reported the finances of the Association in splendid condition. It would be interesting to study the source of income and the expenditures of the money of the Association, were there time and space for such discussion. It would be of particular interest to study the cost and income of the various publications of the Association and the work of its Library. The Coöperative Medical Advertising Bureau, which serves the several state association-owned journals in connection with their advertising business, is a fine example of what can be accomplished through coöperative procedures. The Bureau was a success and is due to be a success not only in the matter of finances, but in the protection of the ethics of medical journal publication as well.

The Council on Pharmacy and Chemistry of the Association, too long and too much neglected, received revived interest at this meeting. It was the consensus of members of the House of Delegates, that this important work should be accentuated and publicized.

Back Numbers of the Journal Wanted.—Rather frequently we receive requests for back numbers of the JOURNAL to complete files, and occasionally there is request for a complete set. We have quite a stock of back numbers, but there are quite a few of which we either have none or such an insufficient number that we can hardly spare any at all. We are not concerned except to the extent that we would like to place as many complete files of the JOURNAL as possible in as many appropriate places as possible, for obvious reasons. We have no inclination to traffic in back numbers, except for such a purpose.

Therefore, we are here appealing to our readers to look through any accumulation of old medical journals, of any sort they may have, including ours, and advise us as to what numbers of our JOURNAL they can find, and with which they are willing to part. We will be glad to pay a reasonable price for numbers that we want and can use.

We particularly want as many as we can get of the following numbers: May, June, and October, 1905; May and October, 1906; March, 1908; August, 1914; August and December, 1915; May and September, 1916; October, 1918; February and October, 1921; January, 1922; March, 1926; August, 1930; January, 1934, and June, 1935.

CURRENT EDITORIAL COMMENT*

Sulfonamides in Colonic Surgery.—Among the recent advances in surgery can be included the effect of altering the bacterial flora of the gastrointestinal tract before and immediately following operation, particularly

*This department of the JOURNAL presents editorial comments on current items pertaining to the science, art and practice of medicine, contributed by members of the State Medical Association and scientists closely associated with the medical profession of Texas. Invitation is hereby extended to any member of the State Medical Association of Texas to submit such discussions for this department. The discussions should not be more than 500 words in length.

on the colon, by the administration of sulfasuxidine, which was first described in 1941. Since that date, the drug has been used extensively and several reports of its usefulness have been published.

John DeJ. Pemberton, of the Mayo Clinic, made the following statement in discussion of a paper on carcinoma of the colon:

"The changes that have occurred in surgery of the colon since the introduction of chemotherapy have been as spectacular as the changes wrought by iodine therapy in surgery of exophthalmic goiter . . . it was only after preoperative iodine therapy had been standardized that the surgeon could be reasonably assured that, barring some accident, the patient with exophthalmic goiter would endure an uncomplicated partial thyroidectomy in one stage. And, so, in the field of colon surgery, only in recent years, since the advent of chemotherapy, could the surgeon be reasonably confident that the patient with carcinoma of the colon or rectum would survive an uncomplicated operation for resection of the colon."

The use of sulfasuxidine and more recently the selected use of sulfathalidine has been largely responsible for this improvement. It has been demonstrated that the colon of the experimental animal heals more readily following the administration of these sulfonamides.

Evidence, both experimental and clinical, accumulated over the past four years indicates that sulfasuxidine and sulfathalidine are bacteriostatic agents which produce a significant modification of the bacterial flora of the bowel and will help to give a satisfactory mechanical preparation of the bowel preceding surgical operations while the patient continues on an adequate protein and carbohydrate diet. Postoperative morbidity studies show that these drugs, when given during the pre- and postoperative periods, act as aids, contribute to a lowering of the operative mortality, and make an occasional procedure possible which might otherwise not be feasible.

It should be emphasized that these drugs are properly considered only as aids in colonic surgery, and their use should not in the slightest degree encourage a relaxation in the application of proved surgical principles. So-called aseptic procedures should be used whenever possible, but, when necessary, an open anastomosis of bowel can be done with a much greater degree of safety. Now, the preservation of blood supply through the avoidance of tension by properly placed fine sutures becomes much more important than chance soiling of the field by the modified contents of the bowel.

REFERENCE

1. Pemberton, J. DeJ., in discussion on Coller, F. A., and Vaughan, H. H.: Treatment of Carcinoma of the Colon, Ann. Surg. 121:395-411 (April) 1945.

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THE EVALUATION OF PALPITATION

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The common symptom of palpitation, which is rarely due to serious disease, frequently arouses in the mind of the patient a sensation of anxiety out of all proportion to its true significance. Most of the conditions which cause it are readily amenable to treatment once they are recognized. The problem of therapy, therefore, centers primarily around that of diagnosis. In certain instances special methods, such as electrocardiographic tracings, studies of the blood sugar, measurement of the basal metabolic rate, or determination of hemoglobin and erythrocyte levels are needed. However, in general, a reasonably accurate impression can be obtained from the examination of the patient by the simple clinical methods, and especially so if a careful history be taken. The discussion to follow will, therefore, center around the question of the clinical recognition of the various causes of palpitation.

PRIMARY DISTURBANCES

This symptom is not always indicative of any disease process. It occurs in healthy persons under conditions of severe exertion or strong emotional stress. Hence, it can be considered significant only when it occurs in the absence of such obvious precipitating factors.

One of the most frequent causes is a *disturbance of the rate or rhythm of the heart.* The most common such disorder is the premature beat or extrasystole. The patient complains of a sudden "jump" or "skip" of the heart, and if seen while the disorder is present, will be found to have a beat interrupting the normal sequence and occurring prematurely, usually followed by an abnormally long pause. Premature beats may be brought about by various drugs, such as tobacco, alcohol, caffeine, or digitalis, and also by gaseous distention of the abdominal viscera. In many instances the cause cannot be determined. Frequently no treatment other than reassurance is necessary because the patient is not concerned about the "skip," but about its significance. When the premature beats are frequent and produce considerable distress, they can often be alleviated by the administration of potassium salts or of quinidine. Since the latter drug may be dangerous when given to patients with certain types of cardiac disease, it should be employed only when electrocardio-

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graphic changes show that no serious impairment of conduction exists.

An important group of conditions leading to palpitation comprises those characterized by ectopic tachycardia, that is, by a rapid heart beat due to an abnormal focus which is acting as pace maker. The various ectopic tachycardias are distinguished from simple or normal tachycardia by the fact that they set in instantaneously. Usually this is readily perceived by the patient and the history will ordinarily serve to differentiate this group of disorders from other types of tachycardia associated with palpitation, but accompanied by a normal cardiac mechanism arising in the sino-auricular node.

Of the several types of ectopic tachycardia, auricular fibrillation is the most important because it is common and usually occurs in people with structural heart disease, more particularly in those with thyrotoxicosis, mitral stenosis, and senile degeneration of the myocardium. When auricular fibrillation is responsible for palpitation, the diagnosis is usually made with ease, because this is the only condition which is likely to be associated with a grossly irregular heart and marked tachycardia. Auricular fibrillation may occur with a normal or only slightly rapid rate. Such cases do not concern us here because they are rarely accompanied by palpitation.

Auricular flutter is one of the rarer causes of palpitation and is recognized with great difficulty. Usually an electrocardiogram is necessary.

Paroxysmal auricular tachycardia is a fairly common condition. It should be suspected when a person with no evidence of structural heart disease has attacks of extreme tachycardia of instantaneous onset. If the patient be seen in the attack, the rate will usually be found to be 180 or faster, and the rhythm perfectly regular. Vagal stimulation by means of pressure on the carotid sinus or on the eyeballs, by forced expiration against a closed glottis, or by the induction of gagging or vomiting will often cause the attacks to cease abruptly.

Ventricular tachycardia is much rarer and decidedly more serious. It is usually the result either of overdosage of digitalis, or disease of the coronary arteries. It not infrequently complicates acute myocardial infarction. The onset of the attack is abrupt and the rate is usually between 150 and 190. Vagal stimulation has no effect on the condition because the ventricles receive few, if any, vagal fibers, being different from the auricles in this respect. Quinidine is the specific drug in the relief of this condition and may be life saving.

SECONDARY DISTURBANCES

The conditions which have thus far been discussed constitute primary disturbances of the heart. There is an important group of *secondary disorders of the heart,* that is, disorders in which the heart is affected as result of disturbances elsewhere in the body, which may also cause palpitation. Any condition which leads to moderate increase in rate, associated with an increase in the volume of blood pumped per minute or per beat, is likely to be accompanied by palpitation. The most important of such conditions are hyperthyroidism, anemia, fever, and spontaneous hypoglycemia. The recognition of the first three conditions needs no elaboration. However, a word about the diagnosis of spontaneous hypoglycemia, which is one of the most frequent causes of palpitation, may be in order. This condition should be suspected in any patient who complains of recurrent attacks of weakness, palpitation, nervousness, and sweating, if the attacks never set in within the first hour and one-half after meals. Typically, the attacks occur about two and one-half to four hours following a meal. Many of the patients with this disorder tend to have an excessively high carbohydrate intake and are often inclined to eat between meals. Frequently the patient has himself noticed that eating tends to prevent or relieve the symptoms, but, unless specifically asked, fails to mention this important fact.

Examinations of the blood sugar are of relatively little value unless carried out at the time the symptoms are present, and since the attacks are of short duration the physician often never sees the patient during such periods. Hence, an attempt to reproduce the seizures by the administration of insulin may be of great diagnostic value. Since symptoms can be produced in any healthy person by the administration of a sufficient quantity of this drug, the important point is not whether symptoms are produced but whether the exact symptom pattern of the spontaneous attacks is reproduced. In order to rule out the factor of suggestion it is usually necessary to control the effects of insulin by giving other drugs such as atropine or nitroglycerine, which produce symptoms of a different nature, and to insist that the patient pick out which drug produces symptoms similar to those of the spontaneous attacks. Unless the insulin test is rigidly controlled it is likely to be misleading and to cause a falsely positive diagnosis in many psychoneurotic persons.

When hypoglycemia is suspected as a cause of palpitation, one important diagnostic measure is the therapeutic test, which con-

sists of the utilization of a diet very low in carbohydrates and high in protein. Such a plan of management will cause the attacks to disappear in the great majority of instances if spontaneous hypoglycemia is the cause. One should remember that severe forms of this disease due to tumors of the islands of Langerhans or other structural endocrine disorders are very rare, but that mild forms, not dependent on structural disease of the pancreas but due to excessive formation of insulin as the result of the habitual intake of large amounts of carbohydrate, are common. Only rarely is operation on the pancreas justifiable and then only after failure of the disorder to respond to dietary regulation and after thorough metabolic studies. In the experience of the writer spontaneous hypoglycemia is one of the most common causes of palpitation and the diagnosis is commonly overlooked because sufficient time is not taken in eliciting the history which would yield the clue.

There are several conditions which lead to a disturbance of the circulation commonly spoken of as "neurocirculatory asthenia." Among the etiologic factors may be convalescence from acute diseases, the presence of low-grade infections, and—more commonly—prolonged and severe emotional stress. This condition is particularly common in military personnel and is often seen in civilians. Palpitation, nervousness, weakness, and ready fatigability are among the outstanding symptoms. These manifestations usually appear on effort, and hence the term "effort syndrome" is often applied in such cases. The point is that the amount of effort required to produce such symptoms is much less than in normal persons. The condition known as neurocirculatory asthenia is, therefore, not an etiologic entity, but simply consists of a group of symptoms of which palpitation is one of the most frequent in importance, produced by various disorders which alter the function of the circulation without causing any structural disease. It so happens that the most common cause of the condition is severe emotional stress. However, similar circulatory alterations may be produced by entirely different disorders of the type already mentioned. The psychogenic type of neurocirculatory asthenia is one of the several types of cardiovascular neurosis, but differs from the others in that here there are measurable abnormalities in the circulation in the sense of changes in the heart rate, blood pressure, and usually in the cardiac output per minute. There are other types of neurosis falling into the general group of anxiety states, in which palpitation may also exist, but in which there is no abnormality of pulse rate, blood pressure, or cardiac output.

In these various psychogenic disorders of the circulation dyspnea is usually not a very prominent symptom, while palpitation and weakness are likely to be in the foreground of the patient's complaints. In this respect the psychogenic disturbances of the heart are quite different from the organic diseases, which are likely to be characterized by dyspnea, pain, and edema as the chief complaints, and palpitation and weakness are relatively minor complaints. These facts, plus the additional ones that the heart is never enlarged, that significant murmurs such as those occurring in diastole are absent, and that objective signs of congestive heart failure are lacking, will, when considered in relation to the emotional makeup of the patient, usually suffice to differentiate the strictly functional from the organic disorders of the heart.

TREATMENT

The treatment of palpitation is the treatment of the cause. Each case should be investigated from the standpoint of a possible disturbance of the rhythm of the heart and, hence should be seen when the symptoms are present if possible. One should also search carefully for thyrotoxicosis, anemia, low-grade infections, and for hypoglycemia. If these several conditions can be eliminated and if the patient presents the personality picture of an anxiety state, the chances are strong that the condition is psychogenic in origin. Most of the causes of palpitation can be treated with fair success and their recognition depends on a thorough examination of the patient as a whole, and more particularly on a painstaking history as to the exact circumstances under which the symptom occurs.

2211 Oak Lawn Avenue.

CENTRAL AGENCY TO SERVE PHYSICALLY HANDICAPPED

The National Society for Crippled Children and Adults, Inc., 211 West Wacker Drive, Chicago 6, Ill., is establishing a central agency for all personnel qualified to serve the physically handicapped. It invites registration by qualified persons in the following listed and related categories:

Physicians specializing in physical medicine and orthopedic surgery.

Technicians—Occupational therapy, physiotherapy, medical stenography, dietetics, industrial nursing.

Speech correctionists, physical educators, teachers of arts and crafts, teachers of trades, testing psychologists, clinical psychologists, guidance specialists, medical social workers, and social case workers.

All applicable commissioned and enlisted personnel eligible or soon to become eligible for release are invited to register.—S. G. O. Notes, Oct. 31, 1945.

HUMAN ENCEPHALITIS DUE TO THE WESTERN EQUINE ENCEPHALOMYELITIS VIRUS

S. EDWARD SULKIN, PH. D.
DALLAS, TEXAS

The importance of the viruses of equine encephalomyelitis as a cause of disease in human beings is now well established. In 1931, Meyer and his associates[20] reported the discovery of a virus as the cause of an epizootic of encephalomyelitis among horses and mules in the San Joaquin Valley of California. Since that time the disease has occurred in several midwestern and western states. Shortly after the discovery of the Western equine virus, Meyer[19] reported the occurrence of encephalitis in three persons closely associated with horses having encephalomyelitis, suggesting the possibility of human infection. In 1938, Eklund and Blumstein[6] pointed out the relation of human encephalitis to encephalomyelitis in horses and investigated the occurrence of human cases in Minnesota, and in the same year, Howitt[12] reported the recovery of the virus of equine encephalomyelitis from the brain of a child. An extensive outbreak of encephalitis in both horses and man occurred in the north central states and the adjacent Canadian provinces in 1941. The causative agent of this epidemic was shown to be the Western equine virus; approximately two thousand human cases were reported, resulting in more than three hundred deaths.[15, 17] Other major outbreaks due to the Western equine virus have occurred in both horses and man.[2, 3, 10, 13]

In 1933, equine encephalomyelitis appeared in several eastern states. Ten Broeck and Merrill[22] and Giltner and Shahan[9] reported the isolation of an Eastern strain of equine encephalomyelitis virus similar to the Western type discovered by Meyer, but serologically different. In 1938, several workers[7, 8, 23, 24] investigated an outbreak of encephalitis in man due to the Eastern equine virus. This outbreak, which occurred in Massachusetts, consisted of 40 proved cases and resulted in eight deaths. Evidence that the Eastern strain of equine encephalomyelitis virus may cause infection in man and animals in other sections of the United States (lower Rio Grande Valley, Texas) was presented by Hammon[10] and by Bohls and Irons.[2]

A third type of equine encephalomyelitis virus, which is immunologically distinct from both the Western and Eastern strains, is the virus of Venezuelan equine encephalomyelitis. This agent was isolated and identified in 1938 by Beck and Wyckoff[1] and by Kubes and Rios.[16] Casals, Curnen, and Thomas[4] recently presented the first evidence that the virus of Venezuelan equine encephalomyelitis may be the causative agent of an illness in man. Subsequently Lennette and Koprowski[18] reported 8 cases of laboratory infection with the Venezuelan virus.

During the fall of 1944 there was an epidemic of encephalitis among horses in Texas.

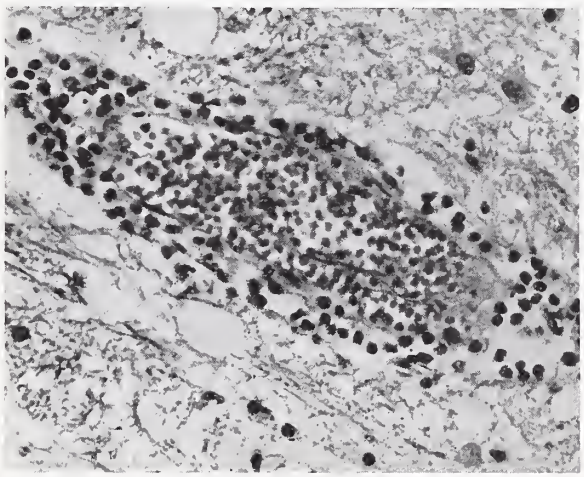

FIG. 1. Section of pons showing marked perivascular infiltration of round cells.

Approximately 770 of the 588,000 horses in the State of Texas had encephalomyelitis during the three-month period between September 1, 1944, and December 1, 1944. The case fatality rate was 21.68 per cent.* During this period at least 3 cases of human encephalitis occurred in this area.

CASE REPORTS

A 14-year-old boy was admitted to the hospital on October 31, 1944, after a three-day illness, during which time he had symptoms of non-projectile vomiting, headache, and extreme nervousness. On admission he exhibited choreiform movements and vomited a large amount of chocolate-colored material. The patient was extremely lethargic on physical examination. Superficial reflexes were present, and deep tendon reflexes were symmetrically hyperactive. A lumbar puncture showed an initial pressure of 240 mm. of water. About 100 white blood cells were present, of which 64 per cent were polymorphonuclear leukocytes and 36 per cent were lymphocytes. No organisms were seen on microscopic examination and aerobic and anaerobic cultures were subsequently negative. The patient continued to be lethargic and after about eighteen hours lapsed into coma. Tendon reflexes were lost. Respirations became labored twenty-eight hours after admission, and the pulse became weak and thready. The temperature was 104.2 F. on admission and increased to 106.8 F. in twenty-four hours. The patient be-

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This study was supported by a grant from the Rose Lampert Graff Foundation, Los Angeles, California.

*This information was supplied by Dr. E. A. Grist, Chief Veterinarian, Livestock Sanitary Commission of Texas.

came cyanotic and died thirty-one hours after admission.

Important pathological findings are summarized:* The mediastinal lymph nodes were slightly enlarged and soft. The lower lobes of both lungs presented numerous nodular areas of consolidation; the right lung weighed 590 Gm. and the left 410 Gm. The myocardium was softer than normal and pale gray. The liver parenchyma was pale gray and the edges of the liver everted on section. Other abdominal viscera were essentially normal on gross examination. The meninges were clear except for hyperemia,

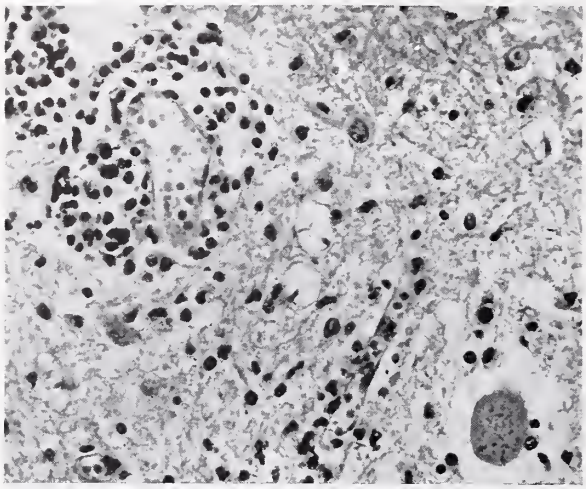

FIG. 2. Section of spinal cord near anterior gray horn revealing perivascular lymphoid and polymorphonuclear infiltration, and degeneration of large nerve cell.

and the spinal fluid was only slightly cloudy. Brain and spinal cord sections showed diffuse hyperemia.

The microscopic examination revealed a marked encephalomyelitis (see Fig. 1 and 2). The inflammatory reaction was most apparent in the spinal cord, but involved the medulla, pons, and midbrain to a striking degree. Perivascular infiltration, with lymphocytes predominating, was evident in many sections. Occasionally fibrinous thrombi were found in the surrounded vessels. The spinal cord and upper medulla showed diffuse infiltration of polymorphonuclear neutrophiles and lymphocytes. In such areas destruction of nerve cells and neuroglia was evident. Although there was intense hyperemia of leptomeninges, brain tissue, and spinal cord, no inflammatory reaction was evident in the cerebrum, corpus striatum, or cerebellum. In the cerebrum and basal ganglia, however, small perivascular petechiae and a slight demyelinization of perivascular nerve tissue were noted. Histopathological study of the lungs revealed confluent bronchopneumonia and areas of hemorrhage, while the heart showed slight acute focal interstitial myocarditis. There was marked fatty degeneration of the liver. The spleen was hyperplastic in the white and red pulp. Other tissues were essentially normal on histological study.

Spinal fluid drawn during life and brain and spinal cord tissue removed at autopsy were received for virus study on November 1, 1944. Blood was not tested. The spinal fluid specimen, obtained soon after the patient was admitted to the hospital, proved to be bacteriologically sterile. It was stored in the dry ice storage cabinet at —76 C. pending further observation on the patient. The patient died on the day after admission and an autopsy was performed three hours postmortem. Cultures of the brain and spinal cord, submitted to the laboratory for virus study, were negative. Spinal fluid, brain, and spinal cord were each injected intercerebrally into four 3-weeks-old Swiss mice and two guinea pigs. Prior to inoculation the brain and spinal cord were ground in physiological saline to make 10 per cent suspension. None of the animals receiving spinal fluid or spinal cord tissue showed signs of infection, while two of the four young mice receiving brain tissue exhibited neurological symptoms on the third day after the inoculation. One of these animals was immediately killed. The brain was found to be free from bacteria. A 10 per cent suspension of this mouse brain was inoculated into additional normal mice and guinea pigs. Both guinea pigs inoculated with the original human brain tissue showed a marked febrile response (105.6 F. and 105 F., respectively) within twenty-four hours after the inoculation. One of these guinea pigs showing tremors, weakness, and partial paralysis of the hind legs was killed on the fourth day after inoculation and the brain, after removal of a section for histopathologic study, was stored in the deep-freeze unit for further animal passage. The second guinea pig, which was found dead on the sixth day, was discarded. Seitz filtrates of brain tissue from mice of the second passage showing symptoms were infectious for both mice and guinea pigs, and it was found that the agent could be maintained by successive passage in these animals. The short incubation period, infectivity of the agent for both guinea pigs and mice, together with the typical encephalitic symptoms in these animals, suggested the presence of one of the viruses of equine encephalomyelitis. Histologic examination of the brains of mice (Fig. 3) and guinea pigs (Fig. 4) which died or were killed following

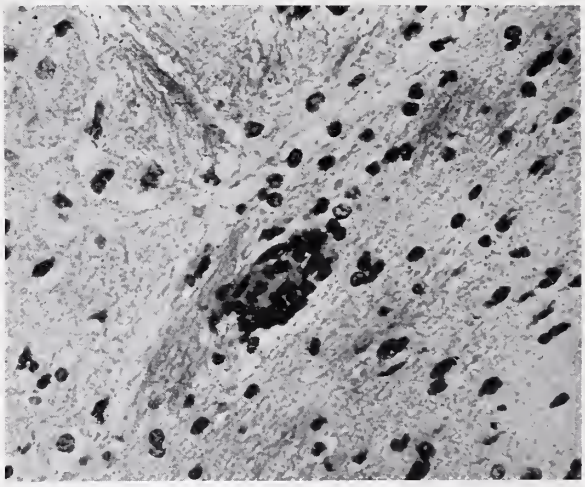

FIG. 3. Section of mouse brain with perivascular lymphoid cuffing.

inoculation with the virus further verified the diagnosis of encephalitis. Identification of the virus as the Western type of equine encephalomyelitis was made through neutralization tests with serum of rabbits immunized to known strains of Western and Eastern equine virus and St. Louis encephalitis virus. The newly isolated agent was neutralized by the Western equine immune rabbit serum but was not affected by the serum of rabbits immunized to the Eastern strain of equine virus or the virus of St. Louis encephalitis.

Two additional cases of equine encephalomyelitis

*The author is indebted to Dr. C. T. Ashworth, Pathologist, Parkland Hospital, Dallas, Texas, for the summary of the pathological findings, and for furnishing spinal fluid and brain tissue from this patient for the virus study described later in the text.

in man occurred in the vicinity of Abilene, Texas.* These patients, both veterinarians, had had contact with horses suffering with the disease. In each of these persons the disease was relatively mild and both patients made an uneventful recovery. The presumptive clinical diagnosis of equine encephalomyelitis was confirmed in this laboratory by demonstrating the presence of neutralizing and complement-fixing antibodies in blood serum obtained during convalescence. The interval from onset of symptoms to bleeding for convalescent serum in each case was about six weeks. The antigens for the complement-fixation test were prepared from infected mouse brains according to the method of Casals and Palacios[5] and included the viruses of Eastern and Western equine encephalomyelitis, St. Louis encephalitis, and lymphocytic choriomeningitis. Normal mouse brain antigens were used as controls. The complement-fixation test was conducted as described by Casals and Palacios.[5] The neutralization tests were performed with the same neurotropic viruses according to the method described by Olitzky and Harford.[21] The intracerebral route of inoculation was used. Both convalescent-phase serum specimens showed an exceedingly high neutralizing index† against the Western equine virus, and fixed complement in the presence of antigens prepared with this virus. The convalescent serum obtained from one of the patients (Dr. R. L.) contained sufficient antibody to neutralize approximately 10,000 mouse intracerebral lethal doses of the Western equine virus. This serum, in a dilution of 1:16, fixed complement in the presence of antigen prepared with this virus. The serum from the second patient (Dr. C. M. L.) neutralized approximately 1,000 lethal doses of the same virus, and together with antigen prepared with this agent fixed complement in a serum dilution of 1:8. No cross-neutralization or cross-complement fixation reactions were demonstrated with the Eastern equine, St. Louis encephalitis, or lymphocytic choriomeningitis viruses. The high neutralizing antibody titers, together with the results of the complement-fixation tests, would indicate that the diagnosis of equine encephalomyelitis (Western type) is unequivocal.

Since only convalescent-phase serum specimens were available for study, the validity of the laboratory diagnosis depends upon the frequency with which sera from apparently normal persons or contacts of cases of encephalitis give positive results. Evidence is available that complement-fixing antibodies are not easily demonstrated in the sera of normal persons or contacts.[14] Also, sera from normal persons or contacts rarely contain sufficient antibody to neutralize 1,000 to 10,000 lethal doses of virus. The most conclusive diagnostic evidence is available when the virus has been recovered and an increase in specific neutralizing or complement-fixing antibodies demonstrated in the convalescent serum of the patient. It has been shown, however, that serologic procedures are applicable even when virus is not recovered. Immunologic tests should be done on the blood serum obtained during the early stages of the disease and again after recovery of the patient. The presence of specific antibodies is of particular significance if blood specimens taken during the acute phase are negative and become positive with convalescence of the patient.

In certain virus diseases (equine encephalomyelitis and St. Louis encephalitis)

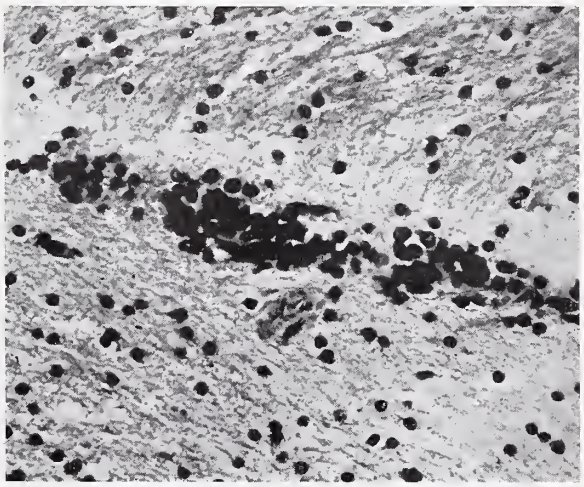

FIG. 4. Section of guinea pig brain with marked accumulation of round cells around small vessels.

specific antibodies develop quite rapidly, while in others (lymphocytic choriomeningitis) antibodies may not become apparent for several weeks or even months. Furthermore, it has been shown that neutralizing antibodies may appear earlier than complement-fixing antibodies. This is especially true in equine encephalomyelitis.[11, 14] Consequently, both laboratory tests are of value in establishing a correct diagnosis, since one might prove negative during the early stages of the disease and the other might be positive. After recovery from equine encephalomyelitis, the results with the neutralization test and the complement-fixation test tend to parallel each other so that one or the other would be sufficient.

SUMMARY

In the fall of 1944 at least 3 cases of encephalitis occurred in a locality where equine encephalomyelitis was prevalent.

A virus, identified as the Western type of equine encephalomyelitis, was isolated from the brain in a fatal case of acute encephalitis.

Two additional cases of equine encephalomyelitis of the Western type in which the patient recovered are presented, diagnosis being confirmed by laboratory tests without recovery of virus.

REFERENCES

1. Beck, C. E., and Wyckoff, R. W. S.: Venezuelan Equine Encephalomyelitis, Science 88:530 (Dec. 2) 1938.

*Reference to these cases is made through the kind permission of Dr. W. V. Ramsey and Miss Ruth Guy, Senior Technician, Hendrick Memorial Hospital, Abilene, Texas.

†The neutralizing index refers to the amount of antibody in the serum which is sufficient to reduce the titer of the virus, as compared with virus titer in the presence of normal control serum.

2. Bohls, S. W., and Irons, J. V.: Laboratory Observations on Virus Encephalitis, Texas State J. Med. 38:260-264 (Aug.) 1942.

3. Buss, W. C., and Howitt, B. F.: Human Equine Encephalomyelitis in Kern County, California, 1938, 1939, and 1940, Am. J. Pub. Health 31:935-944 (Sept.) 1941.

4. Casals, J., Curnen, E. C., and Thomas, L.: Venezuelan Equine Encephalomyelitis in Man, J. Exper. Med. 77:521-530 (June) 1943.

5. Casals, J., and Palacios, R.: Complement Fixation Test in Diagnosis of Virus Infections of Central Nervous System, J. Exper. Med. 74:409-426 (Nov.) 1941.

6. Eklund, C. M., and Blumstein, A.: Relation of Human Encephalitis to Encephalomyelitis in Horses, J. A. M. A. 111: 1734-1735 (Nov. 5) 1938.

7. Feemster, R. F.: Outbreak of Encephalitis in Man Due to the Eastern Virus of Equine Encephalomyelitis, Am. J. Pub. Health 28:1403-1410 (Nov.) 1938.

8. Fothergill, L. D., Dingle, J. H., Farber, S., and Connerley, M.: Human Encephalitis Caused by Virus of Eastern Variety of Equine Encephalomyelitis, New England J. Med. 219:411 (Sept. 22) 1938.

9. Giltner, L. T., and Shahan, M. S.: The 1933 Outbreak of Equine Encephalomyelitis in the Eastern States, North Am. Vet. 14:25-27 (Nov.) 1933.

10. Hammon, W. M.: Encephalitis; Eastern and Western Equine and St. Louis Types, As Observed in 1941 in Washington, Arizona, New Mexico and Texas, J. A. M. A. 121:560-566 (Feb. 20) 1943.

11. Howitt, B. F.: Complement-Fixation Reaction in Experimental Equine Encephalomyelitis, Lymphocytic Choriomeningitis and St. Louis Type of Encephalitis, J. Immunol. 33:235-250 (Sept.) 1937.

12. Howitt, B. F.: Recovery of Virus of Equine Encephalomyelitis from Brain of Child, Science 88: 455-456 (Nov. 11) 1938.

13. Howitt, B. F.: Human Equine Encephalomyelitis and St. Louis Encephalitis in California, 1939-1941, Am. J. Pub. Health 32:503-515 (May) 1942.

14. Howitt, B. F.: Complement-Fixation Test with Human Sera Against Viruses of St. Louis Encephalitis and Equine Encephalomyelitis, J. Immunol. 47:293-302 (Oct.) 1943.

15. Jackson, F. W., and others: Symposium: Poliomyelitis and Encephalitis, Manitoba 1941, Canad. Pub. Health J. 33:241-314 (June) 1942.

16. Kubes, V., and Rios, F. A.: Causative Agent of Infectious Equine Encephalomyelitis in Venezuela, Science 90:20-21 (July 7) 1939.

17. Leake, J. P.: Epidemic of Infectious Encephalitis, Pub. Health Rep. 56:1902-1905 (Sept. 26) 1941.

18. Lennette, E. H., and Koprowski, H.: Human Infection with Venezuelan Equine Encephalomyelitis Virus; Report on Eight Cases of Infection Acquired in Laboratory, J. A. M. A. 123:1088-1095 (Dec. 25) 1943.

19. Meyer, K. F.: Summary of Recent Studies on Equine Encephalomyelitis, Ann. Int. Med. 6:645-654 (Nov.) 1932.

20. Meyer, K. F., Haring, C. M., and Howitt, B.: The Etiology of Epizootic Encephalomyelitis of Horses in the San Joaquin Valley, 1930, Science 74:227-228 (Aug. 28) 1931.

21. Olitsky, P. K., and Harford, C. G.: Intraperitoneal and Intracerebral Routes in Serum Protection Tests with Virus of Equine Encephalomyelitis; Comparison of Two Routes in Protection Tests. J. Exper. Med. 68:173-189 (Aug.) 1938.

22. Ten Broeck, C., and Merrill, M. H.: Serological Difference between Eastern and Western Encephalomyelitis Virus, Proc. Soc. Exper. Biol. Med. 31:217-220 (Nov.) 1933.

23. Webster, L. T., and Wright, F. H.: Recovery of Eastern Equine Encephalomyelitis Virus from Brain Tissue of Human Cases of Encephalitis in Massachusetts, Science 88:305-306 (Sept. 30) 1938.

24. Wesselhoeft, C., Smith, E. C., and Branch, C. F.: Human Encephalitis; Eight Fatal Cases, with Four Due to Virus of Equine Encephalomyelitis, J. A. M. A. 111:1735-1741 (Nov. 5) 1938.

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The average patient has a great deal of confidence in his private physician and expects him to treat tuberculosis much as he would accept other family medical emergencies. Psychological factors make this desirable and practical considerations make it feasible, especially if the physician possesses sufficiently broad understanding of tuberculosis and modern therapeutic methods. Sanatorium care is no longer the only method of tuberculosis control. Many minimal lesions and a limited number of inactive advanced lesions are amenable to out-patient supervision under strict medical care. This supervision and care can often be rendered by the alert general practitioner who possesses modern knowledge of the diagnosis and treatment of tuberculosis. —Herman E. Hilleboe, M. D., U. S. Public Health Service.

LYMPHOSARCOMA

WITH PRIMARY MANIFESTATIONS IN THE GASTRO-INTESTINAL TRACT

REPORT OF SEVEN CASES STUDIED ROENTGENOLOGICALLY

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Lymphosarcoma is defined by Ewing as a true malignant neoplasm arising in lymphatic tissue from proliferation of atypical lymphoid cells. This occurs as (1) a localized or (2) a diffuse process. It is one of the larger groups of tumors referred to as malignant lymphomas or lymphoblastomas and should be classified under this general heading.

Because of the relative rarity of this condition it was thought advantageous to present a brief review of the pathologic and radiographic findings as well as to present 7 cases of lymphosarcoma which manifested themselves as gastro-intestinal lesions which were studied radiographically.

PATHOLOGY

From a pathologic standpoint, lymphosarcoma differs from carcinoma in the same portions of the gastro-intestinal tract in that the former arises in the lymphoid tissue of the submucosa and infiltrates the mucosa and muscularis; whereas the latter arises in the mucosa. Ulceration, though not infrequent, is often absent; but when it does occur, it is thought by some[6] to be due to necrosis from pressure and loss of blood supply rather than to the malignant invasion itself.

Grossly, lymphosarcoma may produce an intrinsic, extrinsic or infiltrating type of lesion. The intrinsic type may manifest itself as single or multiple polypoid growths protruding into the intestinal lumen. This type may produce obstructive symptoms.

The infiltrating or intramural type produces an annular lesion which may involve a single segment of bowel or be more extensive and involve more than one segment. This is more common in the small bowel and, according to Boyd, "the bowel is diffusely infiltrated and thickened so as to resemble a garden hose." This type of growth forms at times an annular cuff in the involved portion of bowel and produces symptoms of incomplete obstruction, rather than complete obstruction as is caused by the polypoid growths.

The microscopic picture presents a diffuse growth of lymphoid cells which lie in reticular tissue. The cells vary in size. The nuclei are compact or vesicular and, according to Ewing, always hyperchromatic, with nucleoli which are inconspicuous. Giant cells are not

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usually part of the picture; but occasionally one sees large multinuclear cells.

Two types of this tumor are recognized: the small cell lymphosarcoma or malignant lymphocytoma, and the large cell or reticulum cell lymphosarcoma. Some authorities believe the distinction between the two types is important from both therapeutic and prognostic standpoints.

In the gastro-intestinal tract the growth originates in the submucosa and invades in each direction, involving on the one hand the mucosa and on the other the muscularis of the bowel (Fig. 1). Even though there is thickening of the bowel, the persistent peristalsis seen radiologically in the early stages of lymphosarcoma is explained by the fact that the muscular layer is not extensively involved. This is a point in the differentiation from carcinoma. The origin of the growth in the submucosa with involvement of the submucosal plexus of nerve endings also explains why the pain is unchanged with either a full or an empty stomach.

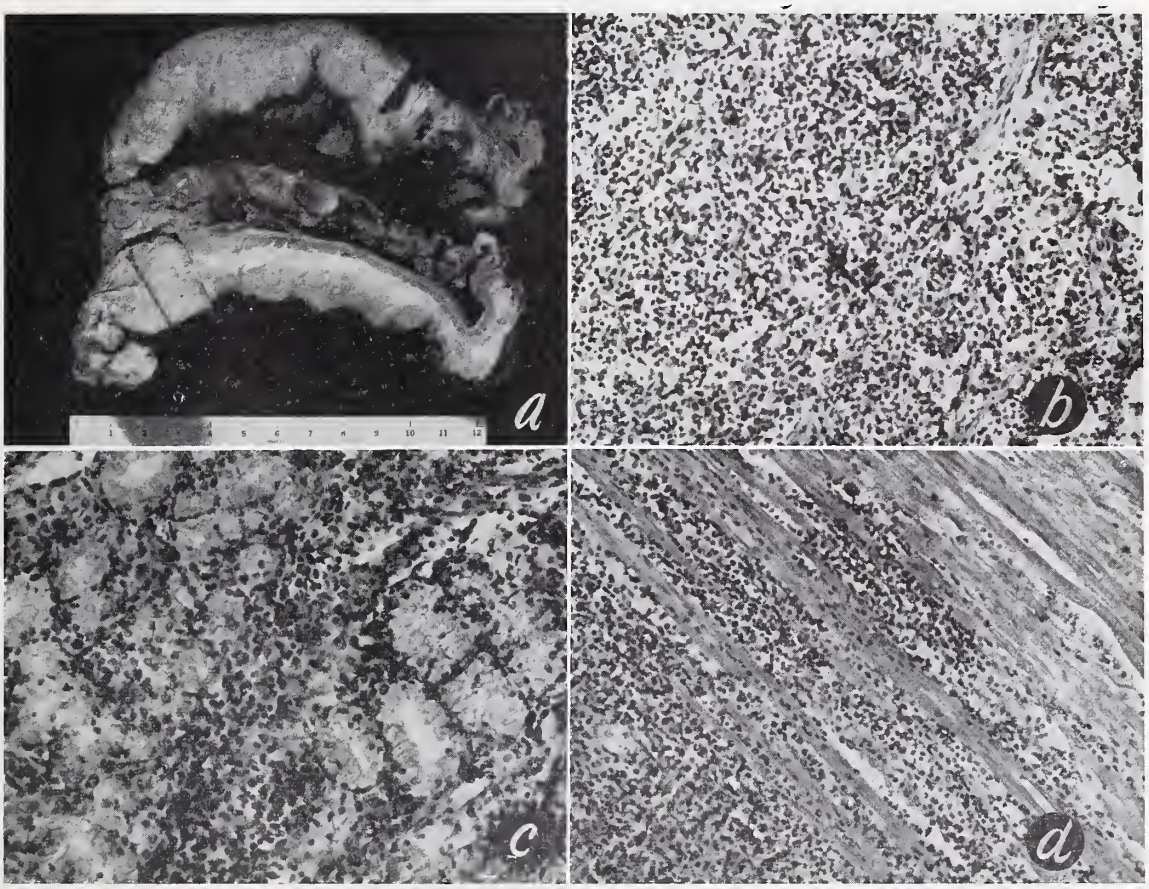

FIG. 1. Lymphosarcoma of stomach. *a*, Operative specimen; growth originated in submucosa and invaded in each direction with involvement of mucosal and muscular coats. *b*, Practically solid mass of lymphocytes in the submucosa. *c*, Details of cells invading the deep mucosal glands in prepyloric region. *d*, Invading cells enter muscle wall.

ROENTGENOLOGIC FINDINGS

Roentgenologic findings are not sufficiently characteristic to allow a specific diagnosis of lymphosarcoma of the gastro-intestinal tract.

In the stomach, roentgenologic findings are reported variously as: (1) negative in cases of early involvement, (2) gastric ulcers which resemble simple, benign peptic ulcers, (3) diffuse infiltration of the entire stomach; with or without prominent rugal markings and with or without peristaltic movement, depending on the amount of involvement of the muscularis, (4) polypoid lesions indistinguishable from carcinoma, or simply as (5) obstructing lesions at the pyloric end of the stomach, type undetermined.

Holmes, Dresser and Camp point out that the possibility of the presence of this disease should be considered in all atypical cases showing carcinoma-like deformities.

In the small intestine, the lower portion of the ileum is the most common site of involvement. Many types of roentgen images present themselves. There may be a very patchy,

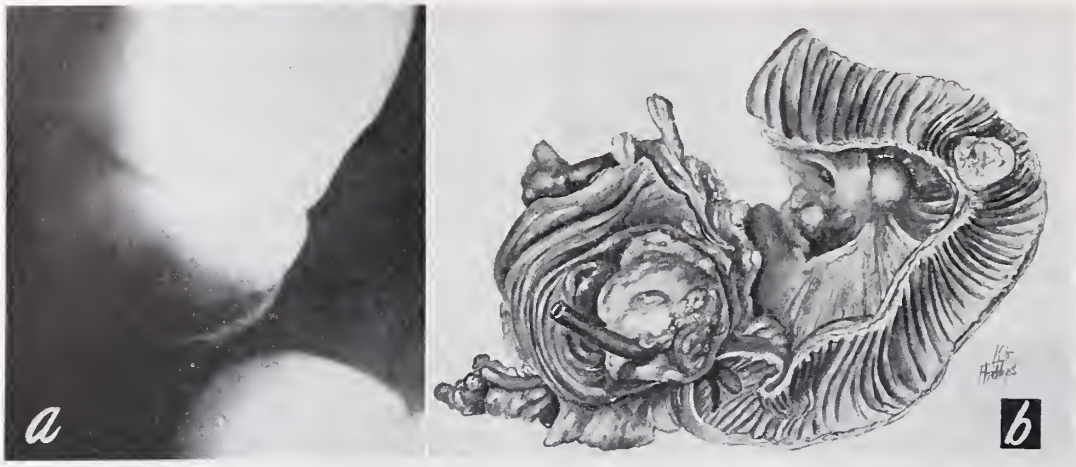

FIG. 2. (Case 1). *a*, Filling defect in the cecum. *b*, Drawing of the operative specimen.

diffuse, irregular distribution of the barium as reported by Golden, or diffuse thickening and contraction deformities as seen in a hyperplastic enteritis. Other findings are those of obstruction, enteroenteral or enterocolic intussusception, or those associated with an ordinary deficiency state.

In the colon, lesions again vary in type and may be: (1) polypoid, seen more frequently in the cecum, (2) filling defects in the lumen of the bowel resembling carcinoma, (3) intussusception of a colocolic type, and, rarely, (4) diffuse infiltration of the bowel.

Weber, Kirklin and Pugh reviewed a large series of cases and in no instance was a diagnosis of lymphosarcoma made roentgenologically. In most instances a neoplastic lesion may be distinguished from a non-neoplastic growth with almost the same degree of accuracy as on gross examination of the specimen. Since Geschickter has pointed out that sarcomas constitute only 3 per cent of malignant growths of the intestinal tract and realizing that lymphosarcomas make up only a part of these, it would be somewhat hazardous to risk such a diagnosis in the face of the overwhelming preponderance of carcinoma. For this reason, the diagnosis made is usually that of a neoplastic lesion or carcinoma rather than lymphosarcoma. Present reported the diagnosis of two cases of lymphosarcoma of the duodenum by x-ray and stated that the extent of the involvement in the bowel suggested the possibility of the disease.

Admitting that a specific roentgenologic diagnosis of lymphosarcoma of the gastrointestinal tract is difficult to make, the fact still remains that roentgenologic examination is indispensable for (1) discovering the presence of the lesion, (2) determining, in most instances, its neoplastic nature, (3) sharply localizing the lesion and (4) permanently recording the original involvement for the determination of its progression or regression at subsequent examinations.

REPORT OF CASES

CASE 1.—A white male, aged 74, came to the Clinic on April 20, 1936, complaining of shortness of breath.

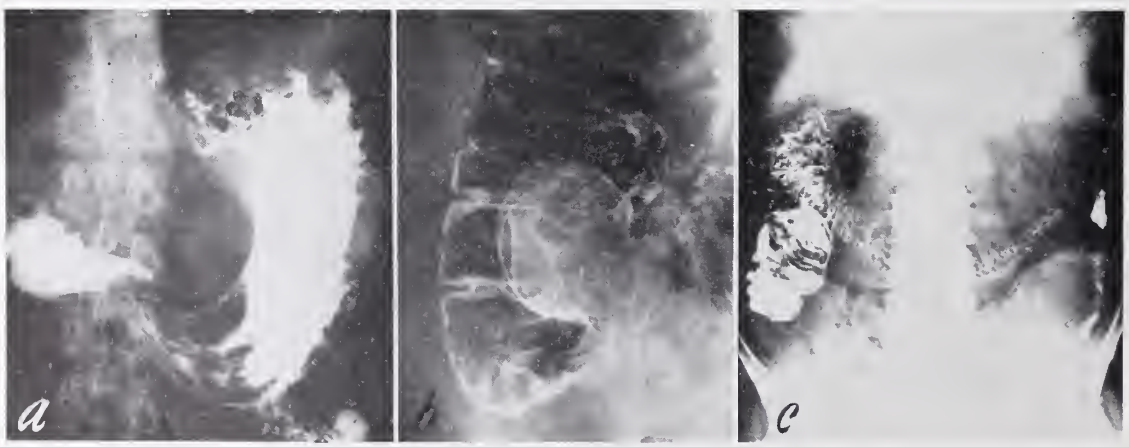

FIG. 3. (Case 2). *a*, Deformity in proximal two-thirds of stomach with apparent destruction of the mucosa of posterior walls. *b*, Localized air film showing large polypoid tumor on the medial wall of cecum. *c*, Evacuation film showing cecal tumor.

The onset had been gradual for ten years and of late had been accompanied by weakness.

Physical examination revealed a suggestion of a mass about 7.5 by 10 cm. in the right lower quadrant. Examination of blood showed 7 Gm. hemoglobin per 100 cc.; erythrocytes numbered 2,688,000; leukocytes, 7,600. X-ray findings in the colon showed a filling defect in the cecum and it was felt that carcinoma must be ruled out (Fig. 2).

Laparotomy revealed a tumor of the ileum some 40 cm. above the ileo-cecal valve with a rather large node in the mesentery proximal to it, and also a cecal growth in the ileo-cecal region with enlarged nodes in the mesentery of the ileum and cecum. This portion of the cecum and terminal ileum was resected. The pathologic diagnosis was: (1) large infiltrating lymphosarcoma, reticulum cell type, of the cecum; (2) infiltrating lymphosarcoma, reticulum cell type, in the terminal ileum, and (3) nodular metastasis of the above tumor in the lymphatic chain between the two groups.

The patient died of bronchopneumonia ten days after admission.

CASE 2.—A white male, aged 70 years, came to the Clinic on April 15, 1940, complaining of weakness, fatigability and diarrhea of several months duration.

On physical examination, a large mass was found in the left upper quadrant which was fixed, irregular, nodular, and 10 to 15 cm. in diameter. High in the rectum there could be felt an irregular, nodular, fixed mass beginning above the prostate. There were some small nodes in the axillary and inguinal regions. On proctoscopic examination, from about 5 cm. within the anal canal as high as could be seen, there was an irregular growth which surrounded the bowel and produced some stenosis. The mucosa was intact in most places and this gave the appearance of infiltrating carcinoma.

On roentgenologic examination, findings in the stomach were: a marked deformity of the proximal two-thirds of the stomach with some apparent destruction of the mucosa on the posterior wall (Fig. 3*a*). This was thought to be due to an extrinsic mass with probably secondary involvement of the posterior wall of the stomach but primary polypoid carcinoma could not be entirely ruled out. In the colon, findings were a partially obstructing lesion in the rectum too low to demonstrate clearly by x-ray. There was a 7 cm. mass in the cecum that had the appearance, both fluoroscopically and with air film, of a large polypoid tumor on the medial wall of the cecum (Fig. 3*b* and *c*). There was also a rounded polyp 2.5 cm. in diameter on the lateral wall of the ascending colon.

The pathologic report on biopsy of two small nodes of the right inguinal region and also proctoscopic specimens was lymphosarcoma.

Roentgen treatments were given from April 20 to May 2 to four anterior and four posterior abdominal fields. Factors were 200 k. v., 18 milliamperes, 50 cm. distance, 1 mm. copper and 1 mm. aluminum filters, 608 *r* delivered to each area without backscatter.

The patient returned June 17, having gained 14 pounds in weight. He complained of shortness of breath on exercise. On examination there were small nodes in the neck, large axillary nodes, and dullness to percussion in the right lung base. There was undue fullness in the upper abdomen and a fairly large rectal mass.

Roentgenologic examination revealed free fluid in the right pleural cavity, with some infiltration present at the right lung base, most marked in the right cardiophrenic angle. There was some slight deformity in the midportion of the stomach. The polypoid type tumor of the cecum was considerably smaller than at examination in April.

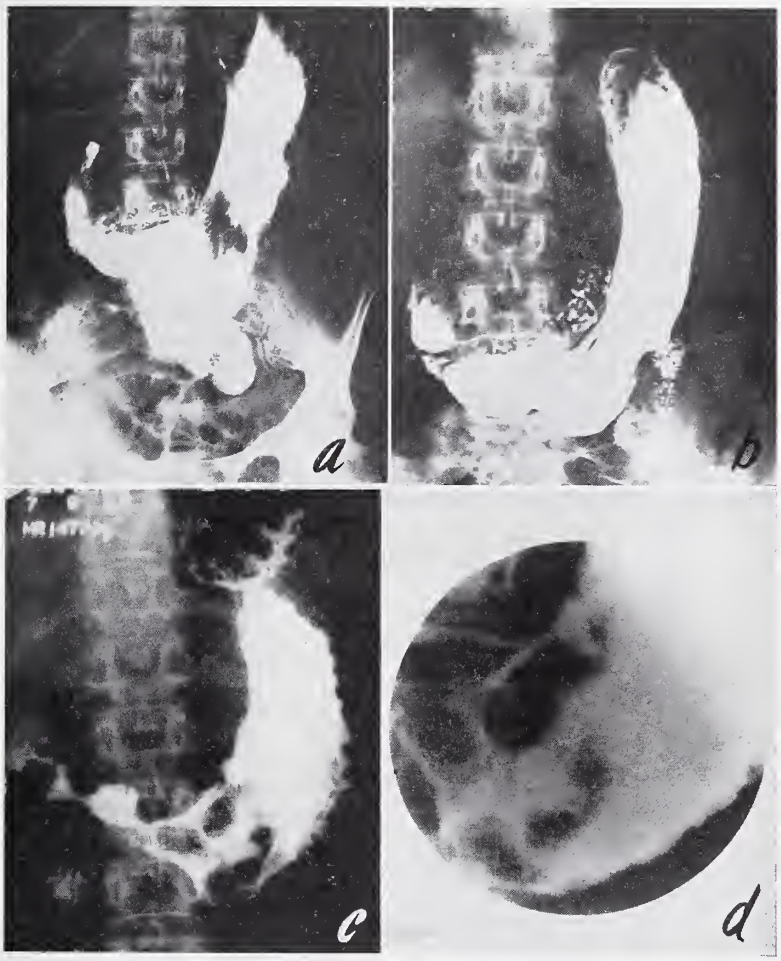

FIG. 4 (Case 3). *a*, Filling defect in mid-portion of the stomach due to large mass which proved to be lymphosarcoma. *b*, Same case, six months after irradiation therapy, at which time the roentgen examination was negative.
FIG. *c* (Case 4). Enlarged polypoid lesion thought to be carcinoma involving the distal one-half of the stomach. *d*, Spot film of a portion of the involved segment.

A second series of roentgen therapy using the same factors and dosage as previously was given from June 6 to July 3 to the chest, abdomen and perineal areas.

The patient died August 23, 1940.

CASE 3.—A white female, aged 57, registered on April 2, 1942, complaining of intermittent pain in her left side of twenty years' duration. Six or seven weeks before admission she noted a mass to the left

and below the umbilicus which gradually increased in size and became more painful.

The only significant finding on physical examination was a round hard tumor approximately 10 cm. in diameter in the left side just below the umbilicus. The tumor moved on respiration and seemed to be attached to the kidney. Laboratory studies disclosed that erythrocytes numbered 4,580,000; leukocytes, 6,550. The concentration of hemoglobin was 13.5 Gm. per 100 cc. of blood. Roentgenologic examination was irrelevant except for a large defect of the lateral side of the posterior wall of the stomach (Fig. 4*a* and *b*). The roentgenologist did not believe it was a primary lesion of the stomach, although the stomach could not be separated from it. He felt it was some extrinsic lesion of the mesentery or omentum secondarily involving the stomach.

A left rectus exploration disclosed a tumor of the greater curvature of the stomach. It was about 15 cm. in its transverse diameter and involved the lower half of the transverse diameter of the stomach. There was a soft mass and some evidence of disease invading the mesentery; but no enlargement was felt in the liver or nodes. Since the biopsy report was lymphoblastoma it was thought injudicious to attempt a resection.

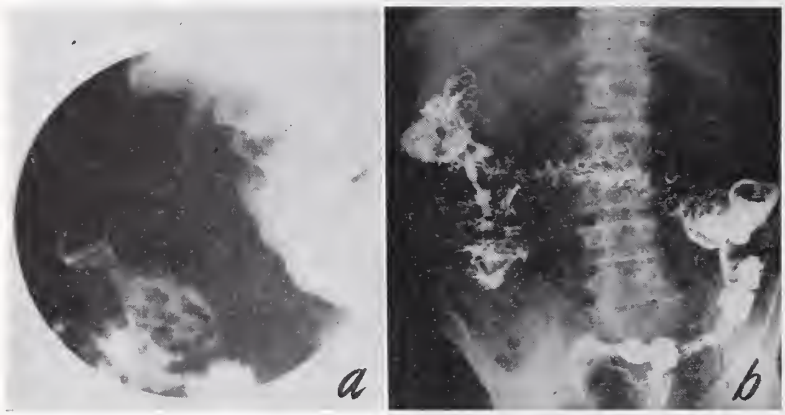

FIG. 5. *a*, Spot film of lesion located in the hepatic flexure of the colon having the appearance of a carcinoma but which proved to be lymphosarcoma. *b*, Evacuation film showing lesion.

Roentgen therapy, consisting of one anterior and one similar posterior abdominal field centered over the epigastric mass with doses amounting to 228 *r*, was administered to alternating fields each day for a total of 1368 *r* delivered to the skin.

The patient returned three times at three-month intervals for subsequent roentgen therapy, and each time was somewhat improved. The total administration of roentgen therapy was 3420 *r* to the anterior abdominal field and 3876 *r* to the posterior abdominal field. She was last seen on April 6, 1945, at which time both physical and roentgenographic examinations showed no evidence of involvement by lymphosarcoma.

CASE 4.—Until April, 1942, this white female, aged 58, had always been in good health. Subsequently she developed stomach trouble with dull aching pain in the epigastric region occasionally radiating to the back and slight nausea, but no vomiting except when she induced it.

The patient was admitted to the Clinic July 6, 1942. She appeared to have lost some weight. The tip of her tongue was redder than normal. There was a mass approximately 10 cm. in diameter in the epigastrium which did not move much with respiration, but could be separated from the liver. Laboratory studies showed hemoglobin 13 Gm. per 100 cc. of blood; the erythrocytes numbered 4,400,000; leukocytes, 9,400. In the stomach, roentgenographic examination revealed a large polypoid lesion involved the distal one-half to two-thirds of the stomach (Fig. 4*c* and *d*). It appeared to be a carcinoma of questionable operability.

A right rectus exploration was performed. There was a mass involving the pyloric one-half or more of the stomach. Some enlarged nodes were found in the immediate region of the stomach, particularly on the greater curvature; but there were no nodules in the liver. The stomach was severed distal to its proximal one-fourth and a Polya-Balfour anastomosis was made. The pathologic report was diffuse lymphosarcoma of the distal half of the stomach and several lymph nodes from the gastric mesentery.

X-ray therapy was inaugurated consisting of one anterior and one posterior abdominal field, 20 by 20 cm., centered over the epigastric region. Factors were 200 k. v., 18 milliamperes, 50 cm. distance, 1 mm. copper and 1 mm. aluminum filters. Doses of 228 *r* were given to alternating fields each day for a total of 1140 *r* delivered to the skin without backscatter per field.

The patient returned four times for observation and additional roentgen therapy. She received a total of 3420 *r* to the anterior abdominal field and 3192 *r* to the posterior abdominal field. In addition, 1064 *r* were delivered to the regions of the upper and lower lumbar spinal column. Her improvement was progressive, although she had a flare-up of backache which was diagnosed as osteoporosis with "fish vertebrae" formation. Her last check-up here was on February 19, 1945, at which time she was feeling much better, had less pain in her back and had gained weight. There was no evidence of recurrence of lymphosarcoma and no spread of the osteoporosis.

CASE 5.—This white male, aged 74, came to the Clinic on May 14, 1943, because of weakness and the fact that he "gets out of breath." Six weeks prior to admission he began resorting to various laxatives for relief of chronic constipation. Subsequently he developed a watery diarrhea and was nauseated and vomited at times. In recent months he had lost about 40 pounds in weight.

He appeared pale and weak. In the upper left quadrant there was a definite, irregular, hard mass which was notched and descended with respiration. This was thought to be the spleen. There was some fullness in the upper right quadrant, but a mass could not be definitely outlined. On analysis of the blood, erythrocytes totaled 4,010,000 and leukocytes, 8,750. The concentration of hemoglobin was 11.5 Gm. per 100 cc. of blood. X-ray studies revealed a carcinoma of the colon in the ascending portion just proximal to the hepatic flexure (Fig. 5).

A median laparotomy was performed and a mass was found in the terminal ileum that involved 30 cm. of the lower ileum. There were patches of the tumor extending upward some 50 cm. A mass just above the ileocecal margin felt like enlarged nodes, the larger being about 3 cm. in diameter. It was believed the involvement was primarily of the terminal ileum rather than of the colon. No nodules were felt in the liver and no masses in the upper abdomen. An ileotransversecolostomy was performed. The pathologic report was multiple lymphosarcoma of the ileum.

After allowing time for the ileotransversecolostomy to function well and knowing the diagnosis, a small bowel examination was done on the patient. Except for a decrease in the motility of the bowel and the

FIG. 6. *a*, Film revealing residual barium in the small bowel six hours after administration and a deficiency type of pattern. *b*, Colon examination made shortly after operation, showing a normally functioning ileotransversecolostomy. *c*, Colon examination made three months after first series of x-ray treatments.

configuration of a deficiency state, no further diagnosis could be made (Fig. 6*a*). A barium enema was also given (Fig. 6*b*). The anastomosis was free and functioning well, and no definite lesion was seen except in the hepatic flexure, as previously reported.

The patient received roentgen therapy consisting of doses of 304 *r* administered daily to alternating fields (four anterior and four posterior, 20 by 20 cm.) for a total of 608 *r* delivered to the skin without backscatter per field. Factors were 200 k. v., 18 milliamperes, 50 cm. distance, 1 mm. copper and 1 mm. aluminum filters.

On returning to the Clinic three months after the first series of x-ray treatments had been administered, the patient was given a barium enema again (Fig. 6*c*). Comparison of the film with those made previously revealed the colon was enlarged in diameter. None of the fuzzy nature was seen which previously had been thought to be due to poor preparation. The small bowel was of a larger diameter and more mobile, with normal haustral markings.

He returned twice at three-month intervals for check-up and additional roentgen therapy, receiving a total of 1216 *r* delivered to each of four anterior and posterior abdominal fields. When last seen in January, 1944, his general appearance was fair. There were no enlarged nodes and no definite masses in the abdomen, although there was a sense of fullness in the right upper quadrant. No more roentgen therapy was given at that time.

The patient died in January, 1945.

CASE 6.—A 53-year-old white female was admitted to the Clinic on July 30, 1943. Her chief complaints were of much gas and cramping in her stomach for two or three months. These symptoms were accompanied by lower abdominal distention and regurgitation of bile.

A complete physical examination demonstrated no significant findings. Blood studies disclosed hemoglobin 13 Gm. per 100 cc.; erythrocytes totaled 4,340,000, and leukocytes, 7,100. X-ray examination revealed a constricting tumefactive lesion in the lower third of the ileum at the level of the sacrum and a low grade, partially obstructing, small bowel tumor (Fig. 7*a*).

Surgical findings were two large tumors in the small bowel: one at the upper part of the ileum, which was about 5 cm. in diameter and 4 cm. in thickness and practically completely obstructing the bowel; the other, about twice as large, with rather marked projection opposite the mesentery. The tumors were resected. Pathologic diagnoses were:

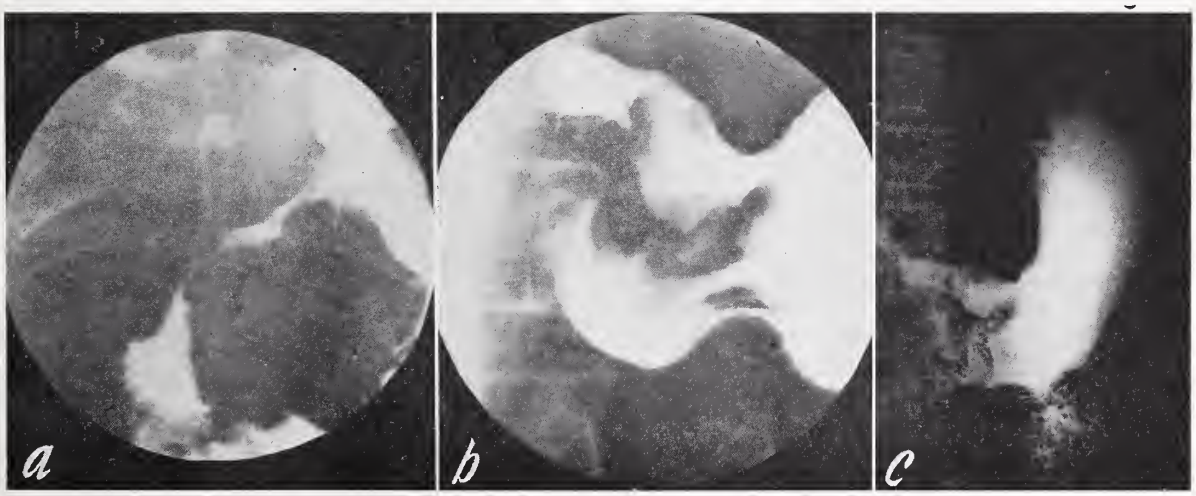

FIG. 7*a*. (Case 6). Spot film showing the constricting lesion of the ileum caused by a proved lymphosarcoma. *b*. Spot film of a portion of the involved segment in Case 7. *c*. (Case 7). Polypoid lesion in the distal half of the stomach thought roentgenographically to be carcinoma of the stomach.

(1) multiple sites of lymphosarcoma of the ileum, the larger one producing practical occlusion of the bowel at that point; (2) lymphosarcoma from a regional lymph node.

The patient received one series of roentgen therapy to four anterior and four posterior fields. Factors were 200 k. v., 18 milliamperes, 50 cm. distance, 1 mm. copper and 1 mm. aluminum filters, administered to the skin without backscatter, 608 *r* being delivered to each area. She did not return for observation. She died November 6, 1944.

CASE 7.—The patient, a white female, aged 59, came to the Clinic February 7, 1944, because of anorexia and loss of weight. On admission she complained of high epigastric or lower thoracic pain anteriorly on the left which radiated down into the left lower quadrant. An x-ray examination of the stomach made elsewhere six weeks prior to admission was reported negative.

The only significant finding on physical examination was a little abdominal distention with some tenderness and fullness high in the epigastrium. Laboratory studies of the blood were reported as follows: erythrocytes, 4,150,000; leukocytes, 10,350; hemoglobin, 12.5 Gm. per 100 cc. of blood. A roentgenographic examination revealed a polypoid lesion which involved the distal half of the stomach and which was thought to be carcinoma (Fig. 7*b* and *c*).

On right rectus exploration, the patient was found to have a lesion involving the pyloric third of the stomach and several enlarged nodes in the gastrocolic omentum and in the gastric mesentery above the stomach. The mass of nodular involvement was larger than the lesion in the stomach. One large node removed for biopsy was found to be a lymphosarcoma. An anterior gastro-enterostomy was performed.

The patient had a somewhat stormy convalescence and it was thought advisable to let her recuperate from the operation before administering x-ray therapy.

The patient died two months after first being seen at the Clinic.

SUMMARY

The term "tumefactive lesion" should be a useful one in the radiologic field just as in gross pathologic diagnosis. This term is used as a general one and does not define a specific etiologic or histologic process; therefore, being used before the more refined methods of diagnosis are employed.

We, as radiologists, are among the first to believe that roentenologic examination can be made to establish the presence of any tumefactive lesion in the gastro-intestinal tract at least as early in the anatomic development of the lesion as it is able to cause symptoms and be manifested by clinical signs. We are able to distinguish a neoplastic from a non-neoplastic lesion with about the same accuracy as the examiner of the gross specimen. These beliefs have been substantiated by surgical exploration to the extent that these roentgenologic capabilities are well recognized.

However, due to the rarity of lymphosarcoma as compared to carcinoma, 1:60 in the stomach as reported by O'Donoghue and Jacobs as well as the simularity in most cases in the gastro-intestinal tract, we have a tendency to report all of these lesions as carcinomas rather than tumefactive lesions or a malignant neoplasm at the particular site noted.

In this condition the roentgenologic findings are not sufficiently characteristic to allow a specific diagnosis of lymphosarcoma of the gastro-intestinal tract, and for the reasons stated above carcinoma is most frequently diagnosed.

CONCLUSIONS

Seven new cases of lymphosarcoma with primary manifestations in the gastro-intestinal tract have been presented. The series included five women and two men. The youngest patient was 51 years of age; the oldest, 74 years of age.

No distinguishing features of lymphosarcoma were found either in the history or on roentgenologic examination. The seven lesions viewed roentgenologically had an appearance indistinguishable from that of carcinoma.

All patients were subjected to an exploratory operation, the diagnosis being made from biopsies. Five of them were subjected to postoperative roentgen therapy as noted in the case reports. Five of the seven patients have died; one, ten days postoperatively of bronchopneumonia, and the others, seven and one-half months, twenty months, sixteen months and two months after first being seen at the clinic, apparently from the lymphosarcoma.

Two patients with involvement of the stomach were last seen at the clinic thirty-four and thirty-six months after their first admission. On their last visits, they showed no evidences of recurrence. One of these patients had been treated with resection and postoperative irradiation; the other received irradiation alone.

REFERENCES

1. Boyd, William: Surgical Pathology, ed. 4. Philadelphia, W. B Saunders Co., 1938, p. 323.

2. Ewing, James: Neoplastic Diseases, a Treatise on Tumors, ed. 4. Philadelphia, W. B. Saunders Co., 1940, pp. 421-431.

3. Geschickter, C. F.: Tumore of the Digestive Tract. Am. J. Cancer. 25:130-161 (Sept.) 1935.

4. Golden, Ross: The Small Intestine and Diarrhea. Am. J. Roentgenol. 36:892-901 (Dec.) 1936.

5. Holmes, G. W.: Dresser, Richard, and Camp, J. D.: Lymphoblastoma, Its Gastric Manifestations with Special Reference to the Roentgen Findings. Radiology. 7:44-50 (July) 1926.

6. Pattison, A. C.: Malignant Lymphoma of the Gastro-intestinal Tract. Arch. Surg. 29:907-922 (Dec.) 1934.

7. Present, A. J.: Primary Lymphosarcoma of the Duodenum. Am. J. Roentgenol. 41:545-548. (Apr.) 1939.

8. Weber, H. M.: Kirklin, B. R., and Pugh, D. G.: Lymphoblastoma Primary in the Gastro-intestinal Tract. Am. J. Roentgenol. 48:27-37 (July) 1942.

Scott & White Clinic.

Industrial x-ray programs are likely to play a major role in tuberculosis control during the next decade.—Editorial, Am. J. Pub. Health, Nov., 1945.

PHYSIOLOGIC APPROACH TO THE PROBLEM OF OOPHORECTOMY

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OVARIAN PHYSIOLOGY

Two main physiologic processes take place in the ovary during each menstrual cycle, beginning with development of a number of primordial follicles the day after menstruation. Each follicle is surrounded by a layer of granulosa cells which produce the female sex hormone, variously named estrin, theelin, and folliculin. Since its chemical forms have the common property of producing estrus in spayed animals, the generic name of "estrogen" is commonly accepted. One follicle, for reasons unknown, outstrips the others in development and attains maximum size about midway between the menstrual periods. The other follicles are blighted, degenerate, and become atretic.

Let us first follow the follicle which produces the ovum. Surrounding the ovum in the primordial follicle, as noted above, is a layer of cuboidal epithelium, the granulosa, derived presumably from the ovarian mesenchyme. There are no blood vessels in the granulosa and its nutrition comes from the surrounding theca interna. This layer of connective tissue is also mesenchymal in origin and occasionally evidences estrogenic activity since tumors arising from it may sometimes produce endometrial hyperplasia and uterine bleeding. The theca externa surrounds the interna and is relatively unimportant in subsequent events. As the primordial follicle develops into the graafian follicle, its center becomes liquefied and the egg supported on a stalk projects into the central cavity. Obviously, an increasingly high blood titer of the estrogenic hormone develops with growth of the granulosa and is responsible for the proliferative phase of the endometrium. Ovulation, aided by a cone of the theca, as Strassman has shown, occurs with maturity of the graafian follicle. Other factors, not mentioned here, play a part in aiding follicular rupture approximately midway between the menstrual periods.

Immediately following ovulation, the point of rupture, or stigma, is sealed by fibrin, the follicle collapses, hemorrhage takes place into the cavity, and the granulosa, and sometimes the theca interna, undergoes a metamorphosis known as luteinization. It must be emphasized here that the corpus luteum, or yellow body, so-called because it is yellow on cut section, is not a new but a transformed follicle. In other words, it is made up predominantly of metamorphosed granulosa cells, which continue to elaborate the estrogenic hormone and, in addition, produce progesterone. These two substances are very closely allied chemically and physiologically, since basically progesterone complements the action of estrogen. In passing, it should be noted that they are antagonistic only in one sense: progesterone allays and estrogen stimulates myometrial activity. In all other actions, progesterone supplements and continues those begun by estrogen. Both estrogen and progesterone have been isolated in crystalline form and are available for therapeutic use. To recapitulate, the estrogenic hormone is produced throughout the entire intermenstrual period but progesterone appears only in the second half of the normal cycle.

The duration of the life cycle of the corpus luteum is extremely constant and averages approximately fourteen days. In other words, from the time of ovulation until the next menstrual period approximately two weeks elapse. Variation in the length of menstrual cycles usually means variation in length of the proliferative stage. If the ovum is not fertilized, the corpus luteum begins to regress four to five days before the onset of the next menstruation. If the ovum is fertilized, the corpus luteum does not regress but continues as the corpus luteum of pregnancy. The end product of the stage of regression of the corpus luteum of menstruation is known as the corpus albicans, so named because of its white fibrotic appearance.

Follicular atresia is the second of the two major physiologic processes occurring in the ovary. The ovum soon dies in those primordial follicles which are not selected to become graafian follicles. In rapid succession there is degeneration and disappearance of the enveloping granulosa layer with distention of the cavity by fluid which is finally absorbed. The final stage of resulting cicatricial obliteration may persist for a considerable length of time, and is known as the corpus fibrosum.

The mature ovary, therefore, is composed from outside inward of the following layers: Covering it is a single layer of cuboidal cells known as the germinal epithelium. These cells are very fragile and often wiped off by simple handling of the ovary, or by the histologic technics of fixation and embedding. The cortex lies immediately under the germinal epithelium and constitutes one-half to two-thirds of the depth of the ovarian substance. The superficial layer of the cortex represents a condensation zone of the

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stroma and is known as the tunica albuginea. The stroma of the cortex contains the follicular elements consisting of numerous graafian follicles and their derivatives, many hundreds of primordial follicles, (corpora albicans and fibrosa), and, rarely, redundant masses of granulosa tissue unused in the formation of the primitive follicular apparatus. It is these masses of granulosa tissue which ultimately may give rise to granulosa cell tumors in some women. There are a number of primordial follicles in the cortex of the ovary of the woman beginning menstrual life. They decrease progressively in number toward the menopause, and disappear thereafter. The medulla is relatively insignificant from a clinical standpoint except that it contains the rete ovarii, which may or may not include rests of primitive Wolffian tissue, significant because of potential ability to form an arrhenoblastoma.

DEVIATIONS OF PHYSIOLOGIC PROCESSES

Deviations of these two major physiologic processes from the normal may occur. Generally, there is little deviation in the course of development of the graafian follicle, but deviations of development of the corpus luteum may take four forms:

1. The corpus luteum may become cystic but function normally.
2. It may become cystic, overdistended, and persistent, the so-called corpus luteum persistens. Rarely, the corpus luteum persistens may be a factor in the production of amenorrhea.
3. Occasionally hemorrhage into the corpus luteum is excessive, with development of a hematoma. Later there is resorption of the blood and a cyst with clear fluid content remains. The corpus luteum hematoma can be confused with chocolate cyst of the ovary.
4. Cysts of the corpus albicans may develop, and to a certain extent resemble corpus luteum cysts.

Primordial follicles failing to reach maturity degenerate, as noted above, into the corpus fibrosum, which often is cystic. At first these cysts are tiny, almost microscopic, and are lined with granulosa which generally flattens, degenerates, and dies. As a result, there is commonly no estrogenic activity in follicular cysts, although rarely the granulosa layer may persist and produce estrogen. Follicular cysts may be distended to the size of a golf ball but practically never beyond. Their fate is resorption or rupture.

From a clinical standpoint, the occasional corpus luteum persistens may cause transient amenorrhea. Rarely, hemorrhage from a corpus luteum cyst may be excessive. Follicular cysts, under extraordinary circumstances and as noted above, may produce estrogen and cause menorrhagia. *By and large, the overwhelming majority of corpus luteum and follicular cysts has no clinical significance.* They do not cause pelvic pain, "ovarian pressure," or backache. In other words, the cystic ovary is a clinically insignificant entity. It is not necessary to puncture or resect the cysts, and above all it is unnecessary to remove the ovary.

Physicians are all familiar with the young woman who has backache and pelvic pain which may or may not be exacerbated at the time of the menses. This girl may, and often does, have a cystic ovary or perhaps a retroverted uterus. In such women it is *strongly emphasized* that one must look elsewhere than to the genitalia for the source of pain. Perhaps a physician cannot diagnose the cause, but he can refuse to operate if he is reasonably sure that cystic ovaries and the retroverted uterus are in themselves harmless entities. On the other hand, this same young woman may repeatedly return to her physician, or to another, insisting that something be done to relieve the pelvic pain. In such instances, exploratory laparotomy may be justified. However, I wish the physician operating on such a girl would have the courage to close the patient's abdomen without meddlesome and mutilating interference when he finds no pathologic entity other than a cystic ovary. Sources of pelvic pain other than the genitalia are to be found in pelvic girdle relaxations, posterior urethritis, and above all, pelvic neurosis.

INDICATIONS FOR OOPHORECTOMY

Indications for oophortectomy fall into three general groups: infection, trauma, and tumefaction of the ovary.

Pelvic inflammatory disease represents the commonest type of ovarian infection and the origin is frequently gonorrheal. The principal, and perhaps the only, reason for operation upon a woman with pelvic inflammatory disease is general disability. In other words, the presence of known pelvic inflammatory disease is insufficient indication for operation unless symptoms of such magnitude as to prevent the woman from carrying on her daily activities are present. Removal of the fallopian tube without the accompanying ovary is seldom indicated in pelvic inflammatory disease because of the technical difficulty of separating the tube from the ovary without seriously jeopardizing the blood supply of the latter. The ischemic ovary often becomes large, cystic, and painful at a later date. It is strongly emphasized that the ovary and its tube be considered as an entity, and spared or removed together.

Acceptable operations for pelvic inflammatory disease, therefore, would include unilateral salpingo-oophorectomy when most of the disease is concentrated on one side; unilateral salpingo-oophorectomy and total hysterectomy; or complete ablation of the genitalia. It should be stressed that hysterectomy for pelvic inflammatory disease must be total and include the cervix; otherwise a focus of infection remains and usually necessitates later operation.

On the other hand, with ectopic pregnancy, which is a good example of trauma, the ovary may not be involved. In this case it is highly desirable to remove the tube and allow the ovary to remain. The situation here is quite different from that of inflammatory disease, since lack of inflammatory reaction permits retention of an uninvolved ovary without jeopardy to its blood supply.

Very roughly, ovarian neoplasms may be divided into thirds, as follows: dermoids, cystadenomas, and all others. The miscellaneous group may be subdivided into two, with ovarian carcinoma representing one-fourth, and the other ovarian tumors one-twelfth of the total number.

All true ovarian neoplasms must be removed soon after diagnosis because of the danger of subsequent malignancy. What then constitutes the diagnosis of a true ovarian neoplasm? It was noted above that follicular and corpus luteum cysts rarely exceed the size of a golf ball. Neoplastic ovarian cysts, on the other hand, continue to grow and may reach enormous size. It is suggested that no woman be submitted to operation for an ovarian cyst unless: (1) the tumor is tennis ball size or larger, and (2) its presence has been proved by at least two pelvic examinations. Most ovarian neoplasms are cystic, but a few are solid. Solid ovarian masses are uniformly true tumors, and, therefore, solidity of an ovarian mass constitutes indication for operation.

SYMPTOMS OF OVARIAN NEOPLASM

In general, ovarian tumors are "silent" and produce few symptoms. When it is remembered that a mass the size of a baby's head may be entirely contained within the true pelvis without the exhibition of any abdominal prominence, it is obvious that an ovarian neoplasm must attain a considerable size before attracting attention. A few malignant ovarian neoplasms, particularly granulosa cell and arrhenoblastoma, may produce menstrual aberration. By and large, however, the majority of the malignant, and practically all of the benign ovarian tumors do not disturb the menstrual function. Because of the asymptomatic nature of true ovarian tumors, periodic pelvic examination is important in women over the age of 30.

Most of the symptoms attributed to ovarian neoplasms arise from complications, such as torsion of the pedicle, incarceration in the pelvis, and malignancy. Torsion of the pedicle seldom occurs in tumors of size greater than a large cantaloupe, probably because there is sufficient friction from the large surface to prevent the necessary motion. It is, therefore, the relatively small ovarian tumor, between the size of a tennis ball and a grapefruit, which commonly twists. The story of torsion is episodic and quite characteristic. Each episode usually follows jarring body activity, as for example, dancing, tennis, and automobile riding. The pain appears rapidly, is referred to the side from which the tumor arises, and reaches its acme in several hours. Untwisting, with relief of pain, commonly occurs within five or six hours. Repetition of twisting at irregular intervals of days, weeks, or months will usually ensue. Although twisting of the pedicle of an ovarian tumor constitutes indication for laparotomy, it is emphasized that the condition is practically never a surgical emergency. Even if torsion of the pedicle persists, operation may usually be done tomorrow morning instead of tonight.

Incarceration in the pelvis may occur with a developing tumor, in which case disturbances of bladder and bowel function may arise.

Swelling of the legs and ascites commonly are signs of malignant ovarian neoplasms, unfortunately of a far advanced nature.

OPERATIVE CONSIDERATIONS

Neoplastic ovarian cysts should be removed intact. Withdrawal of the fluid prior to removal is justifiable only when the operator is certain the cyst is benign. It is a practical impossibility to drain fluid from an ovarian tumor without spilling a few drops into the abdominal cavity. The patient's chance of cure from a malignant ovarian cyst which was tapped are tremendously decreased with intraperitoneal spillage of fluid. Therefore, ovarian cysts should be removed intact through an incision sufficiently large to permit delivery from the abdominal cavity. In the event of giant ovarian cysts, this may involve an incision reaching from the symphysis to the xiphoid.

Since ovarian malignancy may occur in women of 20 years of age, it is always wise to treat all ovarian tumors as potentially malignant. In other words, the liver and omentum must always be palpated for metastatic lesions. Furthermore, the cyst must be opened, either by the operator or by an

assistant, after its removal but before the abdominal incision is closed. Hemorrhage into the cyst, papillations on the interior, and especially on the exterior, surface suggest possible malignancy. Whenever there is doubt, a frozen section must be made. With definite evidence of ovarian malignancy, the only operation which offers hope of cure is bilateral salpingo-oophorectomy and total hysterectomy.

STATISTICAL CONSIDERATIONS

If the procedures outlined above were commonly followed in the United States, there would be a tremendous reduction in the number of normal ovaries removed. Unfortunately, these principles are not followed in the country at large, except in the major gynecologic clinics, and certainly were not followed in one Dallas hospital. During the years of 1939 to 1943, inclusive, the Department of Pathology of this hospital examined 1,320 ovaries. Of these, 993 ovaries, or practically 75 per cent, were normal or contained follicular or corpus luteum cysts. One marvels not only about the poundage of removed ovaries but also wonders what was the tonnage of testicles removed at the same hospital during the same period of time. Of the 327 pathologic ovaries, there were 90 neoplasms, 60 ovaries were involved by endometriosis, 92 were part of tubo-ovarian abscesses, and 85 were diagnosed as chronic oophoritis. One cannot help but conclude this paper with the oft repeated and facetious statement that, "No ovary appears to be good enough to preserve—no testicle is bad enough to remove."

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SULFADIAZINE INEFFECTIVE IN STREPTOCOCCUS INFECTION

With the outbreak of a major epidemic at a large Naval Training center sulfadiazine was found no longer effective in the treatment of diseases due to streptococcus infection, such as scarlet fever, rheumatic fever, and bronchopneumonia, according to a study appearing in the December 1 issue of *The Journal of the American Medical Association.*

Epidemiology Unit Number 22 of the Bureau of Medicine and Surgery, Navy Department, reported that "this was the first time at this center (Camp Hill) or in any other naval activity where sulfadiazine prophylaxis had proved ineffective in controlling streptococcic infection."

Although it became apparent during the study that increasing the dose of sulfadiazine was not effective in controlling this type of disease, the authors found evidence of the stimulating effect of sulfadiazine resistant strains on streptococcic illness.

In conclusion the authors said that "there was some suggestive evidence but no definite proof that, in the presence of sulfadiazine resistant strains, sulfadiazine prophylaxis tended to increase streptococcic infection, particularly scarlet fever."

PARATHYROID ADENOMA OF THE ANTERIOR MEDIASTINUM

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Since Mandl first demonstrated spontaneous hyperparathyroidism in 1925, there have been numerous reports of parathyroid adenoma producing hyperparathyroidism, and in some instances the overfunctioning has been caused by a generalized hyperplasia of the parathyroid glands. By 1936, Wilder and Howell were able to collect 135 such cases which they considered proven. The majority of the cases found in these and subsequent reports were caused by an adenoma of parathyroid gland origin, located in the usual anatomical position of one of the normal parathyroid glands. Cope collected 2 cases from the literature and reported 9 cases from the Massachusetts General Hospital, all of which were found to have a parathyroid adenoma in the mediastinum.

The case reported here was characterized by certain unusual features:

1. The diagnosis was confused with metastatic carcinoma of the bones, whereas it was actually a curable disease.
2. Repeated blood calcium determinations and a biopsy of bone were necessary before the existence of hyperparathyroidism was established.
3. Completely retrosternal parathyroid tumors are comparatively rare.

CASE REPORT

Mrs. M. D. H., at age 40, in 1939, first reported to me, complaining of pain in the entire right side of the abdomen with nocturia, dysuria, and extreme fatigue. There were soreness of the tip of the tongue, tender and painful breasts, and generalized soreness over the entire body. For several years she had experienced periodic frequency of urination with tenesmus, and she had passed a kidney stone in 1937. At the time of her first visit she had nocturia of four or five times, passing large quantities of urine. Fatigue, weakness, and nervous irritability became apparent in 1935; later there were weekly occipital headaches with vomiting. Although she had had an intolerance for fats and had had some discomfort and soreness in the gallbladder area since 1925, there had never been a typical gallbladder colic. The stools had never been of abnormal color but were hard and lumpy with a tendency to constipation. The menses had begun when she was 13 years of age but were interrupted for one year by "typhoid-pneumonia." Following this illness they were normal and regular until 1938 when menorrhagia and metrorrhagia of moderate severity began. She aborted at two months' gestation with her first pregnancy, subsequently delivered a viable child at eight months' gestation, and when she was 22 years old gave birth to a second living child at term. She was able to carry on successfully the hard work of home, farm, and factory throughout life except the four years prior to her first visit. During these four years she had gradually lost thirty-seven pounds of weight and had developed the above symptoms and a pounding heart.

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The aortic second sound was accentuated and the blood pressure was 150/96. The breath sounds were roughened, probably because she had had influenza two months before. The breasts were painful and nodular. There was tenderness over the area of the gallbladder and the descending colon was palpable and tubelike. The uterus was moderately enlarged and retroverted. The cervix was lacerated, eroded, and would not take an iodine stain.

She was hospitalized (June 9, 1939) for curettement of the uterus, cauterization of the cervix, and the application of 2,400 mg. hours of intra-uterine radium. The uterine scrapings and a section of tissue from the cervix were not malignant. By retrograde pyelography some blunting and feathering of the calices along with numerous calcifications in the parenchyma of the kidneys were found. The urine was consistently of low specific gravity and regularly contained numerous pus cells both free and clumped, but no organism was identified as the causative agent. This was in keeping with frequent urinalyses done during the four months prior to hospitalization. For a similar period of time there had been a moderate degree of secondary anemia with absolute leukocytosis (average, 12,500 cells, 75 per cent polymorphonuclear leukocytes). Tuberculosis of the kidneys was suspected, but studies of

TABLE 1.—*Blood Chemistry Findings.*

Date	Ca (mg.)	P (mg.)	Ptase*	Nonprotein N (mg.)	Urea N (mg.)	Creatinine (mg.)	Sugar (mg.)	Uric Acid (mg.)
Sept. 15, 1941	7.9	4.6						
Oct. 13, 1941	9.3	3.4		48	26.0	1.2		7.0
Nov. 5, 1941	11.0	3.1						
Apr. 4, 1942	17.0	3.5		65	66.0	1.7		
Unsuccessful operation: Parathyroid tumor not found.								
Nov. 13, 1942	16.0	3.9	5.1	82	43.0	2.0	107	9.3
Successful operation: Parathyroid tumor removed.								
Nov. 15, 1942	9.6			56				
Nov. 23, 1942	7.5							
Nov. 26, 1942	10.3							
Dec. 31, 1942	9.6	4.0						
Mar. 18, 1943	14.0	3.6	7.3	27	17.5	1.3		
Taking large doses of calcium and parathyroid extract.								
Apr. 5, 1943	9.3	3.1						
June 10, 1943	11.1	3.3	4.9					
Feb. 26, 1943	11.5	4.1	5.6	43	49.0			8.4
May 30, 1944	9.5	4.7	5.9	28	16.0		83	3.4

*Phosphatase (Ptase) expressed in Bodansky units.

concentrated urinary sediments and the inoculation of guinea pigs with this urine failed to establish a diagnosis. X-ray examination of the chest showed old healed lesions but revealed no evidence of active tuberculosis. Except menopausal symptoms, which were largely controlled by estrogen, the general health improved. The urinary symptoms abated under alternating sulfonamide and mandelic acid treatment. In October, 1939, the blood chemistry was essentially normal, including the blood calcium and phosphorus. Blood chemistry findings are given in tabular form (table 1). In April, 1940, Mrs. H. began to have carious teeth removed. At the socket of an upper premolar tooth, a tumefaction developed and normal healing followed curettage. Similarly, at the site of the right lower adjacent premolar and molar teeth, an eroding tumefaction developed which almost involved the whole mandible of this area. The curettings from this area were reported by the pathologist to be composed of multinucleated giant cells. It was said to be a giant cell tumor. Under x-ray therapy there were healing and recalcification. The patient continued to have relatively good health, although she was not under medical supervision. For a period of time a county health nurse administered weekly injections of estrogen.

On June 10, 1941, her left leg gave away while she was walking across her yard. She experienced sharp pain in the hip. There was no shock (pulse 76, blood pressure 142/90). The leg was shortened one inch and was rotated outward. X-ray examination revealed a fracture of the anatomical neck of the femur which was reduced and immobilized by a standard body cast. Radiographically the bone structure appeared poor at that time. Re-examination showed some calcification at the end of seven weeks. After three months the cast was removed.

Two days later, September 12, 1942, while turning in bed she experienced a sharp lancinating pain in the middle part of the left femur. The leg was shortened one inch and there was tenderness below the greater trochanter. There was a pathological fracture about three inches below the lesser trochanter. Irregular areas of absorption down the shaft of the left femur to the condyles caused the radiologist to feel that this was probably a case of metastatic malignancy. The blood calcium was relatively low with a slight increase of the phosphorus. Biopsy of spongy bone from the medial condyle was done (Fig. 1). Sections of this bone showed an increase in bone formation with dilatation of the haversian canals; there were numerous cells and connective tissue. The pathologist reported osteitis fibrosa cystica.*

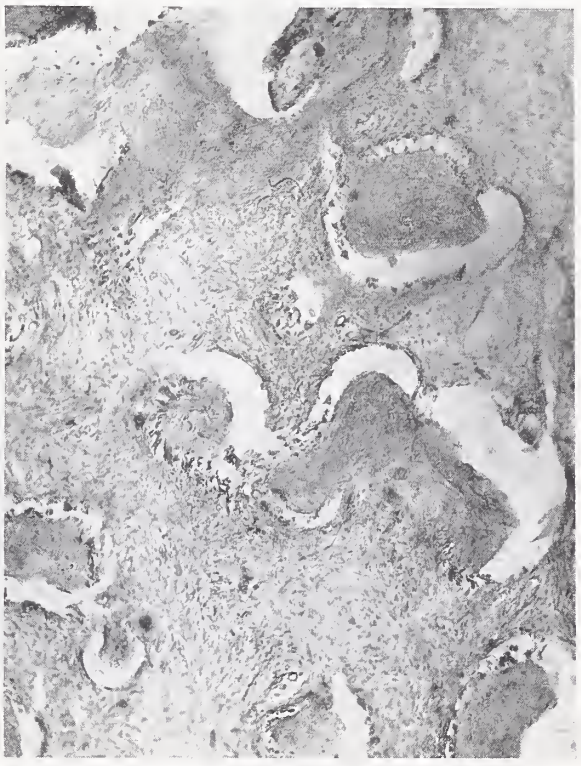

FIG. 1. Microscopic section of bone taken from the medial condyle of the left femur.

On March 28, 1942, there was marked decalcification of the upper third of the left femur with a tendency to a healing of the fracture and no x-ray evidence of involvement of the opposite femur or pelvic bones (Fig. 2*a*).

Exploration of the neck was done through a collar incision cutting the sternohyoid, sternothyroid,

*Dr. Fuller Albright, at Massachusetts General Hospital, reviewed the x-ray films, clinical record, biopsy of bone, and secured the calcium determination on a twenty-four-hour specimen of urine (311 mg.). After the parathyroid adenoma was removed he secured another calcium determination on a twenty-four-hour specimen of urine (63 mg.).

COLLEGE OF PHYSICIANS OF PHILADELPHIA

and omohyoid muscles transversely on both sides. On the right, two parathyroid glands, normal in appearance and location except for increased yellow coloration, were found. On the left a yellowish parathyroid body of normal size was found above the inferior thyroid artery on the posterior surface of the thyroid gland. Behind and adjacent to the left lower pole of the thyroid gland an ovoid encapsulated body 1 by .5 by .5 cm. and of reddish hue was found and removed. Subsequent microscopic study of this tumor proved it to be a thyroid adenoma.

Five x-ray treatments were given over the right and left thyroid areas between June 15, 1942, and July 27, 1942, of about 160 r each.

The patient was readmitted to the hospital November 13, 1942, and showed by roentgenograms unsatisfactory calcification. The blood calcium was 16 mg. and the blood phosphatase was 5.1 Bodansky units. A second operation was done. The thyroid gland was small and fibrotic as a result of the x-ray treatments (basal metabolic rate —34). No parathyroid gland not previously observed was found in the neck. With the entire forefinger in the anteriad mediastinum an ovoid soft mass could barely be palpated on the right side. By careful blunt dissection it was possible to deliver the tumor over the suprasternal notch; it was not necessary to split the sternum. The tumor was 3 cm. in diameter, pink but with a yellow hue, and had a long, delicate, small artery going to it from the right inferior thyroid artery. Microscopic examination showed the tumor to be composed of numerous gland-like structures made up of cuboidal cells. Twelve hours postoperatively, laryngeal stridor developed, but it was controlled by removing the central skin clips and the approximation sutures of the longitudinal muscles, and by giving oxygen. The temperature ranged between 100 F. and 102 F. from the fifth to the ninth day after the operation, with some serous drainage from the wound, and occasionally there was a slight laryngeal stridor. On the tenth postoperative day there was definite carpal spasm and the blood calcium was 7 mg. per hundred cc. of blood. Two cc. of parathyroid extract and two intravenous doses of calcium gluconate (total of 2 Gm.) controlled the symptoms. The patient was sent home on the fourteenth postoperative day with instructions to take 1 drachm of calcium gluconate every four hours. One week later she suffered a generalized convulsion fracturing the right femoral neck and the neck of the right humerus. It was necessary to give calcium intravenously and parathyroid extract hypodermatically for ten days. For several months it was necessary to administer oral calcium and maintain the patient on a high calcium and low phosphorus diet.

At this time, September, 1944, all of this patient's fractures (six known) have healed, the bone cysts have largely disappeared, and the bones have a much improved density. She is still passing small kidney stones (Fig. 2*b*). Her blood chemistry findings have become essentially normal and there is less pyuria. She is able to do a major portion of her house work but is handicapped by some shortening of the left leg.

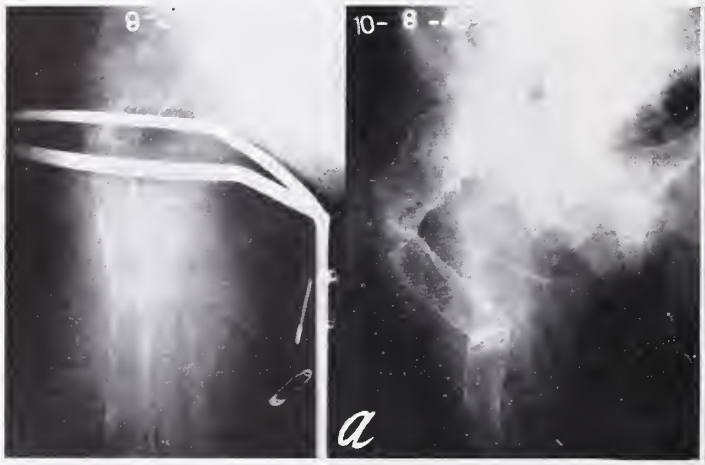

FIG. 2*a*. Two roentgenograms, selected from a series, showing fractures, bone cysts, and marked decalcification.
FIG. 2*b*. Calcification of the kidneys remaining two years after the parathyroid tumor had been removed.

COMMENT

The history suggests that hyperparathyroidism existed at least six years before the first fracture. The relatively low blood calcium, which confused the diagnosis, may have been due to exacerbations and remissions of hyperparathyroidism or to poor kidney function, although the normal blood phosphorus speaks against this explanation as does the fact that the blood calcium later became increased when the blood chemistry showed a greater nitrogenous retention. The phosphatase determinations have been uniformly elevated but not markedly so; such findings are in keeping with the moderate degree of osteoblastic activity as seen in the bone biopsy.

At the first operation two normal parathyroid glands were found on the right and only one on the left, leading to a false security in the removal of what proved to be an aberrant thyroid adenoma. The parathyroid adenoma was found in the right anterior mediastinum at the second operation, whereas it would anatomically have been expected on the left.

CONCLUSIONS

1. The blood calcium may not at all times be elevated in hyperparathyroidism.

2. In suspected cases of hyperparathyroidism repeated blood calcium and urinary calcium determinations, studies of calcium balance, roentgen examinations, and biopsy of bone may be necessary to establish a diagnosis.

3. If a parathyroid adenoma cannot be found in the neck, one may be present in the mediastinum and it may require sections of the sternum for its detection and removal.

4. Any tissue removed should be immediately examined by a pathologist; this should help to reduce the number of secondary operations in such cases.

REFERENCES

1. Alexander, H. B., Pemberton, J. de J., Kepler, E. J., and Broders, A. C.: Functional Tumors and Hyperthyroidism, Am. J. Surg. 65:157-188 (Aug.) 1944.
2. Cope, O.: Surgery of Hyperparathyroidism; Occurrence of Parathyroids in Anterior Mediastinum and Division of Operation into Two Stages, Ann. Surg. 114:706-733 (Oct.) 1941.
3. Mandl, F.: Therapeutischer Versuch bei einem Falle von Ostitis fibrosa generalisata mittels Exstirpation eines Epithelkorperchentumors, Zentr. f. Chir. 53:260-264, 1926.
4. Wilder, R. M., and Howell, L. P.: Remarks on the Etiology and Diagnosis of Hyperparathyroidism, Tr. Am. A. Study Goiter, 1935, pp. 123-133.

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ACUTE MENINGOCOCCEMIA WITHOUT MENINGITIS

REPORT OF A CASE

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The occurrence of meningococcemia without meningitis is unusual despite numerous case reports of this condition within the past several years. Goldring and others[4] encountered only 6 cases of meningococcemia without meningitis in 209 cases of meningococcal infection treated at the St. Louis Isolation Hospital and 10 cases in 77 managed at the St. Louis Children's Hospital during a seven year period from 1937 through 1944, an incidence of 2.8 per cent and 12.9 per cent, respectively.

Many case reports stress the duration of presenting symptoms before admission and deal with the chronic or subacute phases of the condition. Potter, Reid, and Bronstein,[10] however, stress the acute type of infection in their 11 cases.

In the past few years several series of cases of meningococcemia have been reported from the armed services of this and other nations.[2, 5, 8]

CASE HISTORY

J. T. H., a 3 year old white male, was apparently well until March 29, 1945, when he developed fever and became fretful. On March 30, his temperature rose to 104.2 F. and it was found by the attending physician (J. H. Park) that the child's right knee was tender and painful. On March 31, the boy's left knee also became tender and a petechial rash appeared, first on the lower extremities and buttocks, but later spreading to the abdomen. When he was admitted to the hospital on April 1, the left wrist was tender and painful. Petechiae in the right bulbar conjunctiva resulted in some congestion and photophobia of the eye. During the preceding three days he had been nauseated and vomited four or five times. The child refused food.

On his admission the rash was scattered over the extremities, buttocks, and abdomen. There was slight injection of the pharynx but there was no nuchal rigidity or altered reflexes. Kernig's sign was negative.

A blood culture taken on April 1 was positive for gram-negative diplococci and a lumbar puncture on April 2 contained an average of thirty cells upon repeated counts. Smear and culture of spinal fluid was negative. Many new petechiae appeared on April 2 and involved the entire body. Some of these were 0.5 to 0.75 cm. in diameter and were ecchymotic. The child's neck was supple and his feet could be brought up to his face without complaint.

A smear of a skin lesion was taken April 2 and was reported positive for gram-negative diplococci. Therapy was begun with penicillin administered intramuscularly at three hour intervals. Five thousand units of penicillin was administered intrathecally on April 2. Sulfadiazine was begun April 3. The blood sulfadiazine level was 9 mg. per 100 cc. the second day of treatment. The child's temperature fell to near normal on April 3 and the skin lesions were fading on April 4. No new ones had appeared. There was still no clinical evidence of meningeal irritation.

An iritis developed in the right eye, with purulent exudate in the anterior chamber and clouding of the cornea. This was probably embolic in origin. Small subconjunctival hemorrhages had been seen on April 3 in the left eye. Both eyes were improved when the child was dismissed April 8.

On August 25, 1945, the child was apparently normal except for fixed dilatation of the right pupil.

DISCUSSION

It has been the observation of many that cases of acute meningococcemia usually terminate in early recovery or early death.

With such alternatives in mind, it becomes necessary for one to make a diagnosis before meningitis and its clinical signs and symptoms appear, for a case may terminate fatally without such involvement.

The majority of cases of meningococcemia terminate in meningitis. The child whose case is reported here probably would have developed meningitis in time if he had not received treatment, for some cases reported have manifested symptoms of septicemia for several weeks before meningitis developed.

Throughout the child's illness there was no indication of even a mild stiffness of the neck, although the patient was younger than 20 years, the age group in which meningismus occurs most frequently.[9] Neither Dock[3] nor Carbonell and Campbell[1] mention this sign as a feature of their cases. Smith, Thomas, Dingle, and Finland[11] had only 1 pa-

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tient out of 8 cases in whom there was slight stiffness of the neck on anterior flexion. This was present for only one day.

Arthritis was the most prominent complication. It was not the severe type which occasionally complicates meningococcal infections. There was no swelling, redness, or signs of increased fluid in the joints involved. The arthritis was more of the type formerly seen late in the disease, usually as a result of serum therapy. Arthritis occurred in 6 of the 8 cases reported by Smith, Thomas, Dingle, and Finland,[11] and in 10.3 per cent and 9.5 per cent of the cases of Goldring and others.[4]

Skin involvement, which is one of the commonest signs of meningococcal infection, was manifested as a petechial eruption, which when at its height involved both upper and lower extremities, the thorax, abdomen, face, and conjunctivae. A few petechiae appeared on the shaft and prepuce of the penis. As a rule, the more fulminating the disease, the more numerous the petechial and other purpuric manifestations. McLean and Caffey[7] in 1931 further stressed the diagnostic value of smears from the skin lesions. They demonstrated organisms in the skin lesions in 80 per cent of their cases. Smithburn, Kempf, Zerfas, and Gilman[12] found petechiae in 69 per cent of the cases of meningococcal infection occurring in the Indianapolis epidemic.

Eye symptoms are more common in epidemic than in sporadic cases of meningococcal infection. Lewis[6] found that in the Memphis epidemic of 1930, 49 per cent of the cases showed some pathologic involvement in the eyes. An iritis of the right eye developed in the case reported here.

The periodicity of the fever in this case is commonly found in the disease with or without meningitis. Smith, Thomas, Dingle, and Finland[11] mention such a fever curve as being of diagnostic aid if present. Fever was the presenting symptom in 196 of 209 cases reported by Goldring and others.[4]

Other symptoms such as headache and myalgia were not complained of by our patient. They are mentioned by most textbooks as commonly occurring in this disease. Gastro-intestinal symptoms, so frequent in most diseases, were not prominent, but vomiting occurred several times.

SUMMARY

A case of meningococcemia without meningitis in which the patient recovered following sulfonamide and penicillin therapy is reported.

The diagnosis was based on recovery of the organism from the blood stream and skin lesions. The spinal fluid remained sterile.

REFERENCES

1. Carbonell, A., and Campbell, E. P.: Prolonged Meningococcemia; Report of 3 Cases, Arch. Int. Med. 61:646-654 (April) 1938.

2. Daniels, W. B., Solomon, S., and Jaquette, W. A., Jr.: Meningococcic Infection in Soldiers, J. A. M. A. 123:1-9 (Sept. 4) 1943.

3. Dock, W.: Intermittent Fever of 7 Months' Duration Due to Meningococcemia (With an Analysis of 68 Reported Cases of Meningococcemia), J. A. M. A. 83:31-33 (July 5) 1924.

4. Goldring, D., Maxwell, R. W., and Hartman, A. F.: Diagnosis and Management of Severe Infections in Infants and Children; Review of Experience Since Introduction of Sulfonamide Therapy; Meningococcal Infections, J. Pediat. 26:1-31 (Jan.) 1945.

5. Hutson, A. M.; Subacute and Chronic Meningococcal Septicaemia; Review of 6 Cases, M. J. Australia 1:67-71 (Jan. 23) 1943.

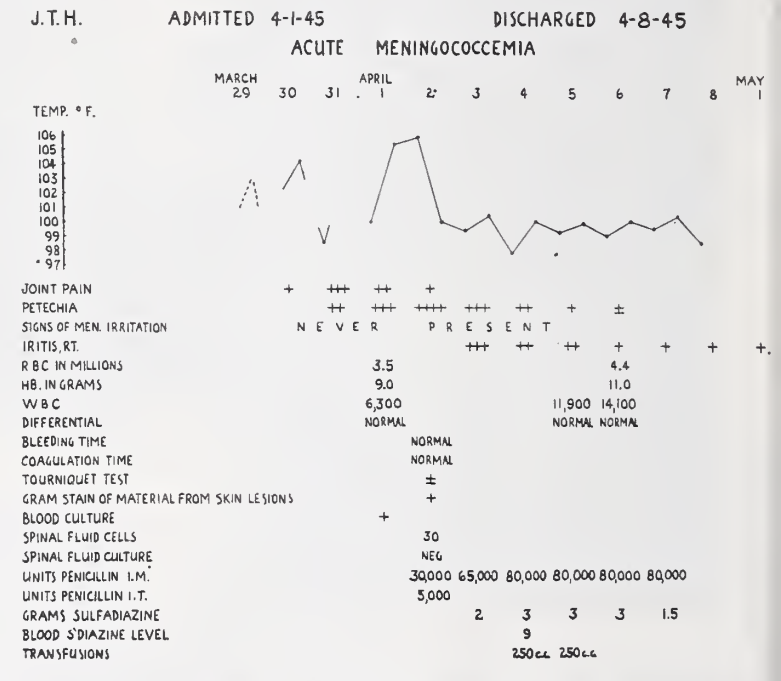

FIG. 1. Pertinent data in case record of patient with acute meningococcemia without meningitis.

6. Lewis, P. M.: Eye Observations in Epidemic Cerebrospinal Meningitis, South. M. J. 24:101-105 (Feb.) 1931.

7. McLean, S., and Caffey, J.: Endemic Purpuric Meningococcus Bacteremia in Early Life; Diagnostic Value of Smears from Purpuric Lesions, Amer. J. Dis. Child. 42:1053-1074 (Nov.) 1931.

8. Martin, L., and Dansie, B.: Unusual Case of Chronic Meningococcal Bacteriaemia, With Note on Nomenclature, Lancet 1:372 (Mar. 18) 1944.

9. Merritt, H. H., and Fremont-Smith, F.: The Cerebrospinal Fluid, Philadelphia, W. B. Saunders Co., 1937.

10. Potter, H. W., Reid, R. D., and Bronstein, L. H.: Meningococcemia Without Meningitis; Study Made at Station Hospital, Fort George G. Meade, Maryland, Ann. Int. Med. 21:200-214 (Aug.) 1944.

11. Smith, H. W., Thomas, L., Dingle, J. H., and Finland, M.: Meningococcic Infections; Report of 43 Cases of Meningococcic Meningitis and 8 Cases of Meningococcemia, Ann. Int. Med. 20:12-32 (Jan.) 1944.

12. Smithburn, K. C., Kempf, G. F., Zerfas, L. G., and Gilman, L. H.: Meningococcus Meningitis: Clinical Study of 144 Epidemic Cases, J. A. M. A. 95:776-780 (Sept. 13) 1930.

VITAL STATISTICS IN PUBLIC HEALTH

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Vital statistics have been studied for centuries for many purposes. Modern statistics were first compiled merely for the purpose of knowing the population in a particular area. More recently, statistical studies of vital information have become a scientific approach of the factors controlling life, death, and disease. Vital studies today are patterned more after the standards used by the U. S. Bureau of Census and the U. S. Public Health Service. An international conference met in 1898 to set up an International List of Causes of Death so that death statistics might be comparable regardless of country, state, county, or city. Every ten years since that time there has been a revision of this International List of Causes to fit additional knowledge gained by the medical profession and to simplify the system. This conference has divided the causes of death into eighteen parts, as follows:

1. Infectious and parasitic diseases.
2. Cancers and other tumors.
3. Rheumatism, diseases of nutrition, and so forth.
4. Diseases of the blood and blood forming organs.
5. Chronic poisoning and intoxication.
6. Diseases of the nervous system and sense organs.
7. Diseases of the circulatory system.
8. Diseases of the respiratory system.
9. Diseases of the digestive system.
10. Diseases of the genito-urinary system.
11. Diseases of pregnancy, childbirth, and the puerperium.
12. Diseases of the skin.
13. Diseases of the bones and organs of movement.
14. Congenital malformations.
15. Diseases peculiar to the first year of life.
16. Senility.
17. Violent or accidental deaths.
18. Ill-defined causes of death.

These eighteen parts were sub-divided according to two hundred numbers which were again sub-divided into *a*, *b*, *c*, and so forth, as necessary to classify specific forms of a disease. This system of classification makes possible the comparison of disease rates since they can be classified the same regardless of locality. An assistance to proper classification where one or more causes of death are given is the Manual of Joint Causes of Death. This manual takes each cause of death separately and indicates which other causes would most likely overrule it as the actual cause of death. This makes it possible for a fairly reasonable and uniform statistical classification of deaths to be applied by even a trained lay person.

The facts entered on a death certificate quite often do not concur in nomenclature and terminology with the International List of Causes of Death. This, in some cases, causes misclassification. The fact that professional people are notoriously poor handwriters also sometimes makes classification difficult. The greatest inaccuracies in these records, however, are a result of the fact that there is no state law requiring medical coroners in the State of Texas. Justices of the peace usually have some pet cause of natural death which sounds business-like and, of course, mysterious to them. Examples of these are "coronary occlusion," "heart disease," "myocarditis," "arteriosclerosis," and "heart failure," which in itself is unacceptable as a cause of death since it happens in all deaths. It is realized that many deaths now being recorded by justices of the peace would have to be recorded by a medical coroner as "cause of death unknown," unless a postmortem examination were performed. But this would be far better than having the records clouded with an excess of deaths improperly diagnosed as being from diseases of the circulatory system.

Information concerning births is an important part of the over-all picture revealed by vital studies. The main reasons are as follows:

1. It is an indication of the rise and decrease of the population through the birth rate.

2. The stillborn infant death and maternal death rates are calculated on the basis of the number of live births, because the number of such deaths occurring is directly variable to the number of births occurring. Birth information, particularly the part recorded on the back of our present birth certificate, which is titled "For Statistical Purposes Only," is often a key to the cause of an infant death should the child die during the first year of life. This information consequently is of vital importance and should be recorded on all birth certificates.

3. A perusal of the birth records is necessary in order to find the stillbirths. These are a definite health problem. As is well known, a stillbirth is often the result of a communicably diseased mother.

4. The birth certificate is a source of information as to the type of care the mother has received, namely, by physician or midwife. The place of birth often indicates that

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the family is indigent and should be visited by a public health nurse.

The other main source of vital information is the weekly morbidity report of the practicing physician. This information indicates the number of cases of diseases existing at any time or during any period of time. It also indicates whether the environmental conditions which foster disease are being controlled so as to reduce the amount of disease. Studies of this information indicate whether the area is becoming a more or less healthful place to live, and are excellent means of comparing one community or area with another.

The accuracy and usefulness of vital studies of course depend upon the completeness and accuracy of the records from which the information is obtained. The birth and death certificates filed in Waco, for example, seem to be accurate and complete except occasionally when the certificate is signed by a nonmedical person. In any health department which makes routine vital studies, the registrar of vital statistics can prove very helpful in obtaining accurate and complete records by calling all apparent discrepancies to the attention of the physician or informant. This practice has greatly improved the accuracy of statistical studies in Waco. Most of the Waco physicians are making weekly morbidity reports which, of course, leaves some cases of disease unreported. This information is, however, of utmost importance in the control of public health problems. This information is followed up with epidemiological studies to determine the source of disease so that epidemics may be avoided. Most diseases are endemically present in any area. Control of them is possible only through knowing how many cases exist and where they were contracted. Continuous disease control may include immunization on a wholesale basis, as has been done with smallpox, or it may require consistent work such as maintaining maternal health clinics, well-child conferences, venereal disease clinics, controlling mosquitoes to prevent malaria, controlling rats to prevent typhus, or many other similar measures.

Some of the most important vital studies include determination of the infant death rate, the stillborn death rate, and the maternal death rate (all of which are based on the number of live births); the most important causes of infant and maternal deaths; and the death rates from each communicable disease (all of which are based on the number of population). Studies in Waco have revealed such facts as that the greatest tuberculosis rate is among the Mexican population and more often among the young adult females; that there is a much higher stillborn rate among the Negroes; that the Mexican stillborn and maternal birth rates are negligible but that the Mexican infant death rate varies annually from three to five times the infant death rate among the other white races; and that the venereal disease death rate in the City of Waco is higher than the national rate while it is much lower in the rural parts of McLennan County. Morbidity reports have shown such facts as that there are between 500 and 600 annual cases of intestinal-borne diseases. Such information is the basis upon which public health programs should be planned.

In Waco, typhus fever has been reduced from 54 cases in 1942 to 25 cases in 1944 through following up morbidity reports with proper methods of rodent control. Sanitary sewer connections are required so as to eliminate the intestinal-borne diseases caused by insanitary toilets. Maternal health clinics and well-child conferences have been set up in proper areas to serve those parts of the population which are responsible for the greater number of our stillborn and infant and maternal deaths. These are only a few of the standard health department programs which have been dictated as necessary by vital studies. These programs constitute a protection to the entire population because disease does not recognize the boundary line between slum areas and the rest of the community. Last year a physician's daughter died of typhus fever. She lived in the best residential section of the town. Typhus control measures were taken as soon as the diagnosis of typhus fever was reported. These methods prevented other cases being contracted from the same source.

Also in Waco on the night of April 4, 1945, a vicious rat bit an 8-months old infant twenty-four times before its parents awoke and drove the animal off. The health of this child was endangered by tetanus, rabies, typhus fever, rat-bite fever, and all other diseases capable of being transmitted by a rat. Within thirty-six hours, three square blocks surrounding this residence were thoroughly poisoned for rats. Previous morbidity reports had dictated the necessity of typhus control measures. Consequently, the Health Department was fully prepared immediately to take the proper steps. The health officer, public health nurse, and sanitarian must be ever conscious of the kind and prevalence of disease in their jurisdiction in order to control the spread of disease.

A community will benefit the greatest by community coöperation among the physicians, the health department, and the local registrar of vital statistics. Each has much to offer the other. The physician can assist the health department by furnishing weekly

morbidity reports and by immediately reporting communicable diseases as they occur. Both the health department and the registrar of vital statistics are aided by prompt filing of birth and death certificates. The registrar of vital statistics can assist the physician in interpreting the laws controlling birth and death certificates, and by furnishing him copies of the International List of Causes of Death.

The most important coöperative service the health department offers, however, is directly in line with the work of the physician. A laboratory is maintained for the purpose of assisting the physician in diagnosing communicable diseases. The director of the health department is a physician who is ready to aid the practicing physician in the control of communicable diseases. The public health nurse is trained to take the necessary specimens and cultures that may aid in the diagnosis of a communicable disease and only awaits the request of the physician. All of the health department personnel are continuously prepared to do epidemiological work to prevent unnecessary illness resulting from the spread of communicable diseases.

A healthy person is a productive person. In these times of "easy money" even the lame and halt can earn a good living and, consequently, people are more able to pay for the services received. This is borne out by the fact that in 1938 in McLennan County 44 per cent of the babies were born in the hospitals while this percentage was 74 in 1944. Statistics also show that 87 per cent of all babies delivered in McLennan County in 1938 were attended by physicians. In 1944 the percentage was 91. It has been said depressions are to some extent caused by the inability of the population to maintain a healthy attitude toward their status in life. A healthy person and a healthy attitude are synonymous. The medical profession, health department, and all facilities available to them should therefore be coördinated to make this the healthiest nation in the world.

REFERENCES

1. Hall, M. F.: Public Health Statistics, New York, Paul B. Hoeber, Inc., 1942.
2. Hiscock, I. V.: Community Health Organization, London, The Commonwealth Fund, 1939.
3. Manual of the International List of Causes of Death and Joint Causes of Death. Issued by the U. S. Department of Commerce, Bureau of the Census, 1940.

ABSTRACT OF DISCUSSION

Dr. E. W. Prothro, Austin: Mr. Love's paper on Vital Statistics in Public Health is timely. No health program is complete without an appraisal. No evaluation is possible without proper statistics. The business man, the stock raiser, and the broker each takes inventory of his assets, regularly. Why should a community not require statistics upon its most precious asset?

A "Manual of the International List of Causes of Death and Joint Causes of Death" should be owned and used by every doctor who practices medicine. It is needless to say that health departments and registrars must have this book, and each member of the personnel should be able to use it.

Health workers should each know local, state, and national rates for the common diseases and be able to quote figures and trends freely to their constituents. It is not asking too much that each doctor and undertaker have available correct statistics upon births, deaths, and disease incidence. Any other professional man would be able to quote figures of his profession.

Proper vital statistics are useful to teachers, preachers, social workers, insurance agents, and, in fact, to every citizen who is interested in the welfare of his community.

City Hall.

GOVERNING A HEALTH UNIT: ORGANIZATION, ACTIVITIES, AND PLANS FOR FUTURE HOUSING

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This paper is primarily a report on the organization, goals, and activities of the Brazos County Health Unit. In addition there will be included general comments on the functions, duties, and maintenance of health units, together with their place in and value to the community.

HISTORY OF HEALTH INTEREST IN BRAZOS COUNTY

Officials of Brazos County first began to consider the problem of health seriously about 1923 when the following entry was made in the minutes of the County Commissioners Court: "It is ordered by the Court that the Court donate $300 to assist in paying a county nurse as provided for under the Smith-Towner Act." On the basis of this decision a succession of nurses was employed. As these women were without equipment and authority their work was limited largely to visiting throughout the county, speaking to groups and giving general advice on the problems of public health. These women and a succession of county officials were instrumental in awakening public interest in community health. It was on this foundation of community health consciousness that the Brazos County Health Unit later developed.

The Brazos County Health Unit was organized in August, 1939, under the mutual sponsorship of the City of Bryan, Texas Agricultural and Mechanical College, Brazos County, and the City of College Station. Under the able leadership of its first governing board, composed of Dr. R. M. Searcy, Dean Gibb Gilchrist, Judge A. S. Ware, and Professor E. W. Steel, and its first director, Dr. T. E. Dodd, the nucleus of a sound and

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progressive health program was established and put into operation. With Judge A. S. Ware, Dean Howard W. Barlow, Commissioner Claude A. Edge, and Ernest Langford, Mayor of the City of College Station, as its present governing board and Dr. James L. Hart as present director, the unit is continuing its program and planning further expansions.

Dr. Joseph W. Mountin, Assistant Surgeon General, U. S. Public Health Service, states that upon entering a community in search of the health department he proceeds directly to the city hall.[1] He may, he goes on, occasionally find the department in the attic. Just for the record, the Brazos County Health Unit ran true to form—it went to the top floor of the city hall! It has since moved downstairs but its laboratory *is* in the basement.

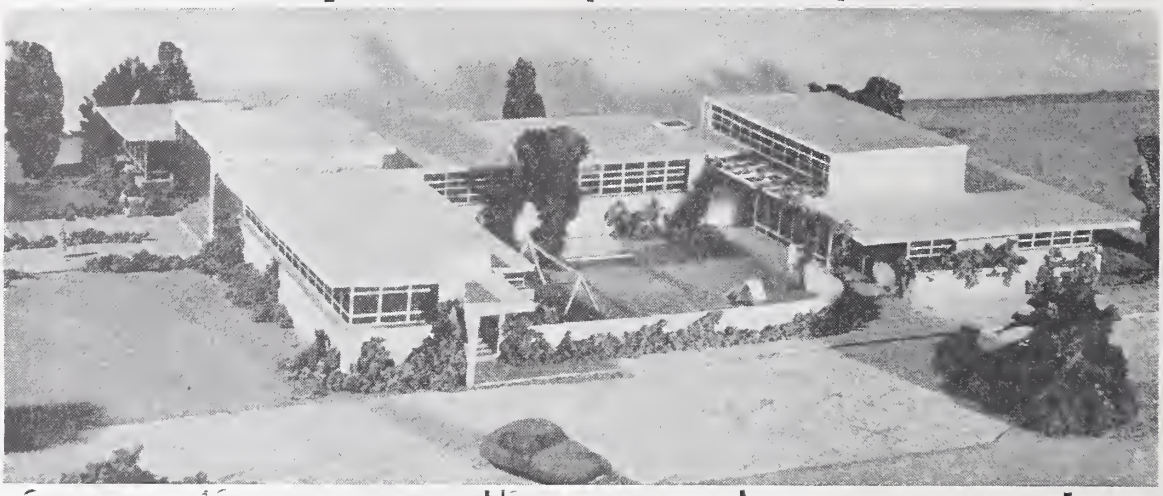

FIG. 1. "Aerial" photograph of a model of the proposed Brazos County Health Center building, showing entrance at left.

This type of housing in no way deterred the governing board and the director. That their program was an ambitious one is evidenced by the following headings taken from their first statement of objective: communicable disease control, school health program, educational program, tuberculosis control program, staff meetings, publicity, nursing services, sanitation program, Brazos County program, City of Bryan program, City of College Station program, special work—all of which is followed by this statement: "This program as outlined is tentative and subject to change when it is felt that a better program will be obtained by so doing!" (The exclamation point is mine.) About the only difference between objectives of the original board and Dr. Dodd, and of the present board and Dr. Hart is that the latter have a still more ambitious program. The present group is not only going to see that its program is carried out—it is going to see that the unit is adequately housed and equipped in a properly designed, modern, fireproof building.

POLICY OF THE GOVERNING BOARD

The governing board of the Brazos County Health Unit is simply a policy-making one. No member of the board attempts in any way to interfere with the unit's program or to suggest to the director how that program shall be conducted. All questions of policy are discussed openly and freely with the director at board meetings, and once a policy has been agreed upon the director is free to use his judgment in its execution. The board brooks no political interference upon the part of any one. The matter of hiring and firing is left solely with the director with the understanding that no appointment is to be made because of political pressure nor is an employee to be dismissed for the same reason. The board is interested only in seeing that the unit serves the purpose for which it was established. To that end it dedicates its efforts and interferes in no way whatsoever with the director and his assistants. A unit is in a bad way when its personnel is chosen through political favor, or when its efforts are thwarted by interference upon the part of its governing board.

The Brazos County Unit was functioning smoothly and efficiently under the direction of Dr. Dodd when the City Commission of Bryan passed a resolution withdrawing support from the unit. Public resentment against such summary action by the commission began almost simultaneously with the publication of the resolution. Members of the commission soon found a veritable tempest hurled against them, and a special election was held on September 14, 1942, to determine whether or not the City of Bryan should continue its participation in the Brazos County Health

Unit. The result was known long before the ballots were counted, but the final tabulation was 534 to 118—a ratio of almost 5 to 1 for continued participation by the city. As a result the city commission resigned en masse and was replaced by a new commission which restored support for the health unit and has continued its wholehearted support since. Thus, a catastrophe which might have had disastrous proportions was soundly averted by a people who believe that a genuine health program is a public asset.

WHAT IS A HEALTH UNIT?

The idea of a health unit as the term is now understood is a comparatively new one; it is proper, therefore, to ask: "Just what is a health unit?" As I have come to understand it after five years of association with the Brazos County Health Unit, it appears to me to be the administrative and technical center of a total health program organized about like this: a staff of ten or twelve persons, including a director or health officer, a head nurse, three or four public health nurses, one sanitary engineer, at least two sanitarians, a laboratory technician, a clerk or secretary, and as many specialists as may be required—all properly housed, adequately equipped, and dedicated to protecting and improving the health of the community, in such a manner as to command the respect of the people who make its very existence possible. As some specific examples of this work the following may be mentioned: preventive control of venereal diseases, tuberculosis, dysentery, and other such diseases; maternal and child welfare; school hygiene; checking the preparation and purity of public water, food, and milk supplies; and an educational program which reaches out into the grass roots.

That may sound like a big order. It is! All too often people fail to understand the real significance of a health unit. They simply have too narrow a conception of its functions and duties. The performance of such commonly accepted tasks as inspections of dairies and food-handling establishments; the abatement of nuisances such as mosquito control and fly-breeding hazards; enforcement of quarantine against communicable diseases—all of this is beneficial to the public welfare, but it is not the sole function of a health unit. A health unit must be concerned with the *total* program of the community which supports it. Any program short of such proportions is largely a waste of time and effort upon the part of doctors, nurses, technicians, and professionally trained personnel, and probably of the governing board itself.

What, then, are the functions and duties of a health unit? The following appear to me to be significant:

1. *A Safeguard of Public Health.*—The unit's sole reason for existence is to promote and improve the health of all men, regardless of race or creed, social status, or financial circumstances.

2. *Public Service.*—The unit protects the community against outbreaks of serious communicable diseases, breaches of proper sanitation, malnutrition of poor income groups, and so forth.

3. *Inspection Services.*—The health unit makes possible unified inspection service of dairies, food-handling establishments, and the like, a service which can only result in the improvement of the public milk and water supply, in cleaner and more wholesome cafes, dining rooms, restaurants, bars, and soda fountains.

4. *Mobilization of Technical Staff.*—The unit makes possible the mobilization of a technical staff and laboratory facilities and the coördination of these with the medical and social resources of the community.

5. *An Educational Institution.* — Education carried on by the unit results in better personal and community hygiene and increased individual and community health consciousness with a resulting improvement in general community health.

6. *Community Interests.* — Finally, the health unit acts as a center for the collection and dissemination of factual data regarding the community's economy, the discussion of public health and social welfare, a center where the interests of the whole community take precedence over all factions, fissures, petty jealousies, and political bickerings.

ACCOMPLISHMENTS OF BRAZOS COUNTY HEALTH UNIT

The aims and objectives of a good health unit, which are the aims and objectives of the Brazos County Health Unit, have been defined. It is quite proper to ask to what extent they have been realized. Has the unit demonstrated its worth? Are the general health conditions of Brazos County any better after five years? In the opinion of the governing board, the answer is an emphatic yes. It is impracticable to list all the concrete benefits, and impossible accurately to appraise all of the intangible benefits which have accrued to this community as a result of the activities of the health unit. While not ascribable to the activities of the unit alone, the following items represent samples of improvement to which the unit has been a major contributing or guiding factor:

In 1941 over 1,200 cases of malaria were reported in Brazos County. Since that time a thorough campaign to eliminate the

Anopheles mosquito and its breeding places has reduced this figure to only 89 cases reported in 1944.

At one time the army installation in Brazos County had one of the highest venereal disease rates in the Eighth Service Command. A vigorous control program with emphasis on case finding and rapid treatment for contagious cases has reduced this rate to the point where no venereal disease of local origin has been reported among some 5,000 men in uniform in Brazos County within the past three months.

In 1943 and early 1944 strict ordinances governing food handling establishments were passed in Bryan and College Station. Sanitarians in the health unit were made responsible for the application of the provisions in these ordinances. In an inspection later in 1944 by a representative of the Texas State Food and Drug Control, the cafes and restaurants received the highest rating awarded any community in the state.

Only Grade A milk is sold commercially in the county and about 75 per cent of all milk sold is pasteurized. Each dairy and milk plant must conform to strict sanitary requirements, and be inspected regularly by a sanitarian from the health unit. The result has been a definite improvement in the quality of milk and in the conditions under which it is produced.

Public health nurses in the field every day visit expectant mothers, mothers with new babies, and homes where contagious diseases exist or are suspected, assisting and educating these people in the principles of good care, good hygiene, and where necessary, quarantine regulations. A decrease in the infant mortality rate and the spread of contagious diseases has resulted.

The unit records all births, deaths with cause of death, and all known communicable disease cases which occur within the limits of the county—vital statistics which are essential to the economy of the community.

COST OF THE HEALTH UNIT PROGRAM

A program such as that of the Brazos County Health Unit costs money, and the governing board takes the position that the people who support the unit have a right to know where its funds come from and where they go. Briefly, there are six sources: State and Federal aid, $13,920; the City of Bryan, $7,010; the City of College Station, $1,200; Brazos County, $3,000; Texas Agricultural and Mechanical College, $8,755; contributions, $400, all of which total $34,285, the budget for the year ending June 30, 1945.

Major items carried in the budget are salaries for the director, sanitarians, public health nurses, veterinarians, secretary, clerk, laboratory technicians, travelling expenses, and supplies.

Supplies are a major item. Mosquito control requires $5,000 annually for labor and materials, laboratory supplies exceed $1,000, and $5,000 is required for travel and maintenance of equipment.

THE HEALTH UNIT BUILDING

Requirements for space vary. Administration, for example, in a small building may require 50 per cent of the floor space, but only 25 per cent in a large building. In the proposed building for the Brazos County Unit the administrative functions are allocated 35 per cent of the gross floor plan. In a properly designed building each function is considered in its relation to the other and to the whole program. Basically, the plan of a health unit building should provide for six main areas.

Main Entrance and Public Waiting Space.—This area should be adequate in space, well lighted, attractive, and cheerful, with essential conveniences nearby. A fairly safe rule to follow is to allow 7 to 9 square feet of floor space per person of the maximum patient load expected at any one time.

Administration Area.—Offices for the director, his staff, and the unit records should be accessible from the public waiting space, but should be provided with a separate entrance, private rest room, and toilet facilities.

Clinic Space.—This is one of the most important areas in a health building. It need not be large but it must be flexible enough to adapt to different services. Privacy for examinations must be possible, together with the proper space between such activities as maternal welfare and tuberculosis control.

Public Assembly Area.—Generous space for public assembly is absolutely essential and should be provided with facilities for motion pictures. The assembly room should have a separate entrance and movable seats in order to allow greater freedom in the use of floor space.

Laboratory.—This space should be adequate for the performance of essential tests required by the unit.

Service Area.—This should include space for a heating plant, for storage, supplies, and building maintenance. Texas summers being what they are, provision should also be made for a cooling system if not for an air-conditioning system.

Of the many other factors which must be taken into consideration in the design of a health unit building, the following should be mentioned: the population to be served by the unit in terms of its effect on potential staff needs and clinic loads, convenience of location, materials, and landscaping. The

design of the building, the specification of materials, and the superintendence of construction, of course, require a competent architect.

PROPOSED BUILDING FOR THE BRAZOS COUNTY UNIT

In January, 1944, the suggestion was made to the governing board that the design of a building adequate for all of the needs of the Brazos County Health Unit be undertaken at once. The board not only approved the idea but bought a suitable site. In addition, the board gave permission to assign the problem of the design of a health unit building as a class project to advanced students in the Department of Architecture, Texas Agricultural and Mechanical College. A model of the approved design was made and the accompanying photograph is an "aerial" view of this model (Fig. 1).

As finally approved, the floor plan is divided into three basic units. Along the front is the administrative unit containing the public waiting rooms, staff offices, private rest rooms, and lounges. A separate entrance for the staff has been included at the right, and this unit is directly accessible from the laboratory unit in the center of the building.

The central unit includes the laboratory, library, and conference space, public toilet facilities, storage, and utility rooms. Laboratory space has been made large enough to accommodate a district laboratory which it is anticipated the State Health Department will place here when the building is completed.

The unit in the rear includes ten general examination and treatment rooms, an x-ray room, clerical and record space, and an auditorium which will seat 120 people comfortably. This unit has its own public entrance immediately off the play area, which is an important feature of the design.

Ample and separate parking areas for the staff and the public are provided. Service driveway and entrance are at the left and rear.

The building is of fireproof construction and its cost is estimated at $66,000. The board is now studying methods of financing its erection and hopes to begin actual work within the year.

REFERENCES

1. Architectural Record: 92:64 (July) 1942.

MISCELLANEOUS

COMING MEETINGS AND CLINICS

State Medical Association of Texas, Galveston, May 6-9, 1946. Dr. H. F. Connally, Waco, President; Dr. Holman Taylor, 1404 W. El Paso St., Fort Worth, Secretary.

American Medical Association, San Francisco, July 1-5, 1946. Dr. Roger I. Lee, Boston, President; Dr. Olin West, 535 North Dearborn Street, Chicago, Secretary.

Southern Medical Association. Dr. M. Y. Dabney, Birmingham, Ala., President; C. P. Loranz, Empire Building, Birmingham, Ala., Secretary-Manager.

Southwest Allergy Forum, Houston, April, 1946. Dr. George W. Owen, Jackson, Miss., Temporary President; Dr. A. H. Braden, 1910 Crawford St., Houston, Secretary.

Texas Association of Medical Anesthetists, Galveston, May 6, 1946. Dr. E. D. Embree, Houston, President; Dr. R. A. Miller, 1415 Nix Professional Building, San Antonio, Secretary.

Texas Association of Obstetricians and Gynecologists, Galveston. Dr. Allen McMurrey, Houston, President; Dr. Julius McIver, 714 Medical Arts Building, Dallas, Secretary.

Texas Chapter American College of Chest Physicians, Galveston, May 6, 1946. Dr. S. E. Thompson, Kerrville, President; Dr. Elliott Mendenhall, Dallas, Secretary.

Texas Club of Internists. Dr. Robert M. Barton, Dallas, President; Dr. Julian C. Barton, 414 Navarro St., San Antonio, Secretary.

Texas Dermatological Society. Dr. Lewis Pipkin, San Antonio, President; Dr. Duncan O. Poth, 1230 Nix Professional Building, San Antonio, Secretary.

Texas Hospital Association, Fort Worth, March 21-23, 1946. Lawrence Payne, Baylor Hospital, Dallas, President; Miss Madelyne Sturdavant, 5709 Velasco, Dallas, Secretary.

Texas Neuropsychiatric Association, Galveston, May 6, 1946. Dr. Titus Harris, Galveston, President; Dr. Fred Rogers, Dallas, Secretary.

Texas Ophthalmological and Otolaryngological Society, San Antonio, December 14-15. Dr. M. K. McCullough, Dallas, President; Dr. E. D. Dumas, San Antonio, Secretary.

Texas Orthopedic Society. Dr. E. A. Cayo, San Antonio, President; Dr. Edward Smith, Houston, Secretary.

Texas Pediatric Society. Dr. Frank H. Lancaster, Houston, President; Dr. John Ashby, Dallas, Secretary.

Texas Public Health Association. Major Lewis Dodson, C. E., Headquarters Eighth Service Command, Dallas 2, Texas, President.

Texas Radiological Society, Dallas, January 14, 1946. Dr. T. B. Bond, Fort Worth, President; Dr. R. P. O'Bannon, 650 Fifth Ave., Fort Worth, Secretary.

Texas Railway and Traumatic Surgical Association, Galveston, May 6, 1946. Dr. W. B. Reeves, Greenville, President; Dr. Ross Trigg, First National Bank Building, Fort Worth, Secretary.

Texas Society for Mental Hygiene, Galveston, March 7-8, 1946. Dr. Paul L. Boynton, S. F. A. S. T. C., Nacogdoches, President; Mrs. Elizabeth F. Gardner, 1617 Watchhill Road, Austin 21, Executive Secretary.

Texas Society of Gastro-Enterologists and Proctologists, Galveston, May 6, 1946. Dr. James J. Gorman, El Paso, President; Dr. George M. Underwood, 4105 Live Oak Street, Dallas, Secretary.

Texas Society of Pathologists, Dallas, Jan. 27, 1946. Dr. Paul Brindley, Galveston, President; Dr. John J. Andujar, 1300 W. Cannon Ave., Fort Worth, Secretary.

Texas State Heart Association, Galveston, May 6, 1946. Dr. Victor E. Schulze, San Angelo, President; Dr. Walter B. Whiting, Wichita Falls, Secretary.

Texas Surgical Society, Temple, April 1-2, 1946. Dr. G. V. Brindley, Temple, President; Dr. Walter Stuck, 1426 Nix Professional Building, San Antonio, Secretary.

Texas Tuberculosis Association. Dr. J. B. White, Amarillo, President; Miss Pansy Nichols, Austin, Executive Secretary.

Third, Panhandle, District Medical Society. Dr. D. D. Cross, Lubbock, President; Dr. George Powers, Amarillo, Acting Secretary.

Fourth District Medical Society, Brady, November, 1946. Dr. H. L. Locker, Brownwood, President; Dr. Glenn H. Ricks, Brady, Secretary.

Fifth and Sixth, Southwest District Society. Dr. Phil A. Bleakney, Harlingen, President; Dr. C. W. Tennison, San Antonio, Secretary.

Seventh, Austin District Society. Dr. Robert B. Morrison, Austin, President; Dr. M. I. Brown, Austin, Secretary.

Eighth, Ninth and Tenth Districts Medical Society. Dr. J. T. Tadlock, Dayton, President; Dr. George W. Waldron, Medical Arts Building, Houston, Secretary.

Eleventh District Society, Jacksonville, March, 1946. Dr. C. B. Young, Tyler, President; Dr. J. M. Travis, Jacksonville, Secretary.

Twelfth, Central Texas, District Society, Corsicana, July, 1946. Dr. Thomas G. Glass, Marlin, President; Dr. H. F. Connally, Jr., Waco, Secretary.

Thirteenth, Northwest, District Society. Dr. A. L. Roberts, Fort Worth, President; Dr. Joe R. Wise, 1212 W. Lancaster, Fort Worth, Secretary.

Fourteenth District Society, Dallas, December 11. Dr. W. C. Morrow, Greenville, President; Dr. A. L. Ridings, Sherman, Secretary.

Fifteenth, Northeast Texas, District Society, October, 1946. Dr. Frank Littlejohn, Marshall, President; Dr. Henry H. Niehuss, Greggton, Secretary.

CLINICS

Dallas Southern Clinical Society, Dallas, March 18-21, 1946. Secretary, 433 Medical Arts Building, Dallas 1.

MEDICAL OFFICERS RETURNING TO TEXAS*

NAME	Serv.†	Location	Release Date
Angelina County			
1. Evans, Charles W.	A	Lufkin[1]	Jan., 1946
Austin-Waller Counties			
2. Sadler, Charles B.	A	Brookshire	
Bee-Live Oak-McMullen Counties			
3. Davis, David W.	A	George West[2]	Dec., 1945
Bell County			
2. Black, Douglas B.	A	Temple[3]	
3. Todaro, Samuel P	A	Temple[4]	Jan., 1946
4. White, James N.	A	Temple[5]	Nov., 1945
Bexar County			
42. Boyd, G. D., Jr.	A	San Antonio	
43. Breuer, Alfred	A	San Antonio	
44. Forbes, Marrell A., Jr.	A	San Antonio	
45. Jones, L. Bonham	A	San Antonio[6]	Jan., 1946
46. Lyon, Ervin F., Jr.	A	San Antonio	
47. Magrish, Philip	A	San Antonio	
48. Todd, David A.	A	San Antonio	
Bowie County			
1. Collom, S. Allen	A	Texarkana	Feb., 1946
2. Jones, John Walter	A	Texarkana	Jan., 1946
3. Kemp, Carlton		Texarkana	
4. McCarty, Ralph L.	A	Texarkana	
Brazoria County			
2. Dyer, Edward L.	A	Sweeny	
Brooks-Duval-Jim Wells Counties			
6. Veit, John P.	A	Falfurrias[7]	Dec., 1945
Brown-Comanche-Mills-San Saba Counties			
7. Claunch, DeWitt	A	Comanche	
Cameron-Willacy Counties			
6. Rodriguez, Hesiquio	A	Rio Hondo[8]	
Cass-Marion Counties			
1. Camphell, J. H.	A	Linden	
Collin County			
1. Rounsaville, John Q.	A	Wylie	
2. Taylor, Surse J., Jr.	A	McKinney	
Cooke County			
3. Griffin, Otho P.	A	Gainesville	
Dallas County			
47. Allday, Louie Edgar		Dallas	
48. Altick, Frank J.	A	Dallas	
49. Aten, Eugene Lester	N	Dallas	Jan., 1946
50. Bush, Douglas M.		Dallas	
51. Cantrell, Roy Hammond		Dallas	
52. Carlson, Glen Devere	A	Dallas	Oct., 1945
53. Cirone, Vincent C.	A	Dallas	
54. Dozier, Fred Sowell		Dallas	
55. Dunlap, James Hudson	A	Dallas	Feb., 1946
56. Eller, William C.	A	Dallas	
57. Fox, Everett Clarence	N	Dallas	Jan., 1946
58. Hart, Gaylord Anthony		Dallas	
59. Hellams, Alfred A.	A	Dallas	
60. Jordan, Frank H., Jr.	A	Dallas	
61. Katz, Sol	A	Dallas	
62. LaDue, Charles Nance		Dallas	
63. Loftis, Earl L.	N	Dallas	Oct., 1945
64. Mason, Porter K.	A	Dallas	Feb., 1946
65. Mitchell, Joseph N.	A	Dallas	
66. Mooney, Ken	A	Dallas	
67. Murphy, Joseph B.	A	Dallas	Dec., 1945
68. Perman, Joshua M.	A	Dallas	
69. Reddick, Walter Grady	N	Dallas	Nov., 1945
70. Rippy, Edwin Luther		Dallas	
71. Scurry, Maurice M.	A	Dallas	
72. Smith, Thomas Edwin	A	Dallas	Feb., 1946
73. Valcik, J. H.	N	Dallas	
74. Winhorn, Claude D.		Dallas	Mar., 1946
75. Windrow, Mercer	A	Dallas[1]	
76. Wylie, John T.		Dallas	
Dawson-Lynn-Terry-Gaines-Yoakum Counties			
1. Daniell, Alfred H.	A	Brownfield	
Denton County			
3. Magness, William H.	A	Denton	
Ellis County			
2. Burnett, Jack F.	A	Ennis	
El Paso County			
5. Bernell, Ed	N	El Paso[2]	June, 1944
6. Black, A. P.	N	El Paso	Nov., 1945
7. Causey, Grady	A	El Paso	July, 1945
8. Cox, L. T.	N	El Paso	Nov., 1945
9. Curtis, W. R.	A	El Paso	Feb., 1946
10. Dietrich, Hervey W.	A	El Paso	
11. Ellis, Jack R.	A	El Paso	
12. Epstein, I.	A	El Paso	Nov., 1945
13. Evans, F. G.	N	El Paso	Oct., 1945
14. Goodwin, Frank	A	El Paso	Nov., 1945
15. Green, J. L.	A	El Paso	Oct., 1945
16. Hatfield, Haskell	A	El Paso	Nov., 1945
17. Homan Ralph	N	El Paso	Oct., 1945
18. Spearman, M. P.	N	El Paso	May, 1944
19. Stapp, C.	A	El Paso[3]	Aug., 1945
20. Von Briesen, D.	N	El Paso	Nov., 1945
21. Wehh, Charles	N	El Paso	Feh., 1944
Falls County			
2. Hipps, Herhert E.		Marlin	
3. Smith, Howard O.	N	Marlin	Jan., 1946
Fannin County			
3. Stevens, James W.	A	Leonard	
Galveston County			
5. Moore, R. M.	A	Galveston	Jan., 1946
6. Quinn, Clarence F.	A	Texas City	Nov., 1945
Gray-Wheeler Counties			
2. Shaddix, James W.	A	Shamrock	
Gregg County			
7. Elkins, Oliver Wayne	A	Longview	
8. Jackson, Carl C.	A	Longview[4]	
9. Watkins, E. O.	A	Greggton	
Hale-Floyd-Briscoe-Swisher Counties			
1. Dye, Everette L.	A	Plainview	
2. Rohinson, G. L.	N	Happy	
3. Wagner, Gerald W.	A	Plainview	
Hardin-Tyler Counties			
1. Pedigo, Paul C.	A	Strawn	
Harris County			
67. Andrus, Bailey C.	A	Houston	
68. Armstrong, John W.	A	Houston	
69. Behrens, Charles A.	A	Houston	
70. Bloom, Manuel G.	A	Houston	Nov., 1945
71. Bonin, Wilford P.	A	Houston	
72. Burr, Harry T.	N	Houston	Nov., 1945
73. Cecala, Philip J.	A	Houston	
74. Curh, Dolph L.	A	Houston	Oct., 1945
75. Dailey, J. Emerson	N	Houston	Nov., 1945
76. Dornak, F. K.	A	Houston	Oct., 1945
77. Fayle, Percy R.	A	Houston	
78. Foote, Stephen A., Jr.	A	Houston	Dec., 1945
79. Ford, Walter A.	A	Houston[5]	Nov., 1945
80. Frawley, John T.	A	Pasadena[6]	
81. Glen, John K.	N	Houston	Jan., 1946
82. Hauser, Ahe	A	Houston	Oct., 1945
83. Hensley, B. C.	N	Houston	Nov., 1945
84. Humphrey, Stanley G.	A	Houston[7]	Oct., 1945
85. Katrihe, Paul	A	Houston	Oct., 1945
86. Klanke, Charles W.	A	Houston	Nov., 1945
87. Leggett, M. K.	A	Houston	Nov., 1945
88. Lewis, Everett B.	A	Houston	
89. Lowe, Thomas E.	A	Houston	Oct., 1945
90. Markewitch, Jake		Houston[8]	Nov., 1945
91. Meyer, Henry S.	A	Houston	Nov., 1945
92. Phillips, Leon	A	Houston	Oct., 1945
93. Pittman, James E.	A	Houston	Dec., 1945

*EDITOR'S NOTE: This list is the second of a series in which it is hoped to name all those physicians who have been in the Armed Forces during the war just past and have now returned to Texas to resume civilian practice. The information in this list has been assemhled from a variety of sources. While an attempt has heen made to secure as complete and as accurate data as possihle, we are aware that omissions and errors have heen made. Not only for publication in the JOURNAL, hut also for the permanent records in the central office of the State Medical Association, we invite and urge correction of and addition to the material here suhmitted. Note that physicians from each county area are numhered consecutively following those listed in the December JOURNAL; the last number in each section therefore indicates the total physicians returned to that county area. The complete total for Texas named to date (Decemher 20), including the accompanying list, is 579.

[1]Formerly of Del Rio.
[2]Formerly of Baton Rouge, La.
[3]Formerly of Savannah, Tenn.
[4]Formerly of Boston.
[5]Formerly of Uvalde.
[6]Formerly of Taft.
[7]Formerly of Benavides.
[8]Formerly of Harlingen.

[1]Formerly of Ann Arbor, Mich.
[2]Formerly of Chicago, Ill.
[3]Formerly of New Orleans, La.
[4]Formerly of Norman, Okla.
[5]Formerly of Shehoygan, Wis.
[6]Formerly of Houston.
[7]Formerly of Baytown.
[8]Formerly of Beaumont.

NAME	Serv.†	Location	Release Date
Harris County (Continued)			
94. Ryan, Bert M.	A	Houston	Oct., 1945
95. Theriot, Roy J., Jr.	A	Houston	Nov., 1945
96. Vaughan, L. M.	A	Houston	Sept., 1945
97. Williford, L. E.	A	Houston	Nov., 1945
98. Wills, S. H.	N	Houston	Nov., 1945
99. York, Byron P.	A	Houston	Oct., 1945
Harrison County			
2. Shane, Hugh	A	Marshall	
3. Tenney, Sam	A	Marshall	
Hidalgo-Starr Counties			
6. Boysen, Arthur E.	A	McAllen	
Hunt-Rockwall-Rains Counties			
3. Roadman, Charles H.	A	Greenville	Feb., 1946
4. Seyler, L. W.	A	Commerce	
Jasper-Newton Counties			
1. Mixson, William C.	A	Kirbyville	Oct., 1945
2. Seale, James N.	A	Jasper	
Jefferson County			
19. Carroll, Roland B.		Port Arthur	Nov., 1945
20. Crumpler, W. E.		Port Arthur	Oct., 1945
21. English, Dudley		Beaumont	July, 1944
22. Hosen, Harris		Port Arthur	Nov., 1945
23. Kaufman, H. J.		Minneapolis[1]	Nov., 1945
24. Killingsworth, W. P.		Port Arthur	Nov., 1945
25. Lewis, C. J.		Beaumont	Dec., 1945
26. Lindsey, Eugene H.		Beaumont	Nov., 1945
27. Long, James W.		Port Arthur	Nov., 1945
28. McRee, W. E.	A	Port Arthur	Oct., 1945
29. Pace, B. F.		Nederland	Oct., 1945
30. Painton, Clifford E.		Port Arthur	Nov., 1945
31. Solis, G. R.	A	Port Arthur	Oct., 1945
32. Willoughby, Russell C.		Groves	Nov., 1945
Karnes-Wilson Counties			
2. Ximenes, Eduardo	A	Floresville	
Kaufman County			
1. Alexander, Eugene B.	A	Forney	
2. Rowe, Robert	A	Kaufman	Nov., 1945
Kerr-Kendall-Gillespie-Bandera Counties			
3. Pfeiffer, Herbert G.	A	Fredericksburg	
4. Tubbs, Harry A.	A	Fredericksburg[2]	
Lamar County			
3. Kerbow, D. F.	N	Paris	
4. McDougal, Luther L., Jr.	A	Paris	
Liberty-Chambers Counties			
1. Davidson, Eli	A	Liberty[3]	
2. Wilson, Thelbert R.	A	Liberty	
Lubbock-Crosby Counties			
6. Reeser, Wayne	A	Lubbock	
7. Taylor, Otis, Jr.	A	Lubbock	
McLennan County			
7. Avent, Woodrow M.	A	Waco[4]	Dec., 1945
8. Fielding, Lewis J.	A	Waco	
9. Norton, Robert O., Jr.		Waco[5]	
Navarro County			
2. Brotman, Jacob	A	Corsicana	
Nolan-Fisher-Mitchell Counties			
4. Rudd, Laurence	A	Colorado	
Nueces County			
10. Arnin, Landon, C.		Corpus Christi	
11. Colyer, George E.		Corpus Christi	
12. Garrett, L. M.		Corpus Christi	
13. Gibson, Norman T.	A	Robstown	Nov., 1945
14. Giles, E. Jack		Corpus Christi	
Palo Pinto-Parker Counties			
3. Lasater, Waldo B.		Mineral Wells	

[1]Formerly of Port Arthur.
[2]Formerly of Temple.
[3]Formerly of New York, N. Y.
[4]Formerly of Cameron.
[5]Formerly of New Orleans, La.

NAME	Serv.†	Location	Release Date
Polk-San Jacinto Counties			
1. Dameron, James H.	A	Livingston	
Potter County			
8. Althaus, J. W.		Amarillo[1]	
9. Garre, Peter R.	A	Amarillo	
Red River County			
1. Wright, James L.	A	Clarksville	
Reeves-Ward-Winkler-Loving-Culberson-Hudspeth Counties			
2. McClure, Wayne H.	A	Kermit	
Runnels County			
1. Robertson, Adolph H.	A	Miles	
Rusk County			
3. Allen, J. C.	A	Henderson	
4. Pruitt, Charles	A	Laneville	
5. Wolfe, Alfred S.	A	Henderson	
Shelby-San Augustine-Sabine Counties			
1. Rosenbloom, Joseph	A	Broaddus	Dec., 1945
Stephens-Shackelford-Throckmorton Counties			
1. Payne, Frank C.	A	Breckenridge	
Tarrant County			
12. Barker, Robert		Fort Worth	
13. Braselton, Chas. W., Jr.	A	Fort Worth	
14. Brewster, C. Burke	A	Fort Worth	Jan., 1946
15. Farrington, N. C.		Fort Worth	
16. Fershtand, J. B.		Fort Worth	
17. Grammer, James H.	A	Fort Worth	
18. Guinn, James Elvis	A	Fort Worth	
19. Hammond, Fred M.	A	Fort Worth	
20. Hawker, L. J.		Fort Worth	
21. Higgins, W. P., Jr	A	Fort Worth	
22. Hook, J. H.		Fort Worth	
23. Kibbie, Horace		Fort Worth	
24. Lace, Ted		Fort Worth	
25. Lees, C. R.		Fort Worth	
26. Levy, Louis J.	A	Fort Worth	Jan., 1946
27. McCollum, C. H., Jr.	N	Fort Worth	Nov., 1945
28. McKenzie, Walton H.		Fort Worth	
29. Major, A. D.		Fort Worth	
30. Petta, Walter B.		Fort Worth	
31. Phillips, O. M.		Fort Worth	
32. Stow, R. C., Jr.		Fort Worth	
33. Tottenham, J. W., Jr.	N	Fort Worth	Oct., 1945
34. West, W. B.		Fort Worth	
Taylor-Jones Counties			
6. Adamson, W. B.	A	Abilene	
7. Daly, John F.	A	Abilene	
8. Pattillo, Guy L.	A	Abilene	
Tom Green-Coke-Crockett-Concho-Irion-Sterling-Sutton-Schleicher Counties			
3. Coleman, Jesse L.	A	Sanatorium	
4. Withers, B. I., Jr.	A	San Angelo	
Travis County			
5. Agnew, William W.	A	Austin	
6. Baggett, Seldon O.	A	Austin	Oct., 1945
7. Chrisman, William P.		Austin	
8. Dryden, S. H.	A	Austin[1]	Sept., 1945
9. Hardwicke, C. P.	A	Austin	Nov., 1945
10. Hilgartner, H. L.	A	Austin	Sept., 1945
11. Jaehne, R. J.		Austin	
12. McCauley, Morris D.		Austin	
13. Primer, Ben	A	Austin	
14. Saldivar, Julian T.		Austin	
15. Suehs, Oliver W.		Austin	
16. Tipton, George W.	A	Marshall Ford Dam	
17. Williams, W. E.		Austin	
18. Zedler, Garland D.		Austin	
Walker-Madison-Trinity Counties			
1. Stein, Ben	A	New Waverly	
2. Heath, J. B.	N	Madisonville	Nov., 1945
Wharton-Jackson-Matagorda-Fort Bend Counties			
1. Dye, Fulton E.	N	Bay City	Mar., 1945
Wichita County			
8. Collins, Paul	A	Wichita Falls	
Young-Jack-Archer Counties			
1. McClure, Edwin E.	A	Jacksboro	

[1]Formerly of Fort Worth.

It can be assumed that no people have a racial characteristic which makes them peculiarly susceptible to tuberculosis because of genotypic traits. Lack of exposure of any group, regardless of race, produces an extremely high incidence of tuberculosis which runs a more acute course when first introduced. After prolonged exposure, native immunity is manifest, with survival of stock resistant to the disease, and with a concomitant decline in the amount of clinical tuberculosis and the approach of saturation point of tuberculinization. With this there is noted a relative increase in pulmonary forms and an accentuation of chronicity.—J. R. McGibony, M. D., and A. W. Dahlstrom, M. D., Am. Rev. Tuberc., Aug., 1945.

CONGRESS ON MEDICAL EDUCATION

The Council on Medical Education and Hospitals of the American Medical Association has announced that the Annual Congress on Medical Education and Licensure will be held at the Palmer House in Chicago on February 11 and 12. The session will deal primarily with reconversion problems, including the continuation education of physician veterans, the relocation of physicians, and the transition to a peacetime aducational program in medical education.

PENICILLIN BY MOUTH EFFECTIVE IN GONORRHEA

Five San Francisco physicians believe that 50,000 units of penicillin administered by mouth every two hours for 10 doses may result in the cure of most patients with gonorrhea, according to the October 6 issue of *The Journal of the American Medical Association.*

The physicians are Windsor C. Cutting, Richard M. Halpern, Ernest H. Sultan, Charles D. Armstrong, and Charles Leslie Collins, from the Departments of Pharmacology and Therapeutics and of Medicine of the Stanford University School of Medicine.

Oral penicillin, administered in capsule form, was the treatment used on 77 patients, 53 of whom had acute gonorrhea. Of this latter group 38, or 72 per cent, were cured.

Many experiments were tried to find a coating for penicillin which would protect it from stomach acids. It has been found in the past that these acids interfere with the absorption of the drug in the blood. The doctors succeeded in finding an alkaline coating material which gave highly favorable results from the standpoint of absorption.

HOSPITALS RELEASED BY ARMY

Ashburn General Hospital, McKinney, and Harmon General Hospital, Longview, were released in December by the Army, which expected to release 23 hospitals out of its wartime peak of 65 by January 1, 1946. Major General Norman T. Kirk, The Surgeon General, in making this announcement indicated that the hospitals will be offered to the Veterans' Administration or back to their former owners in the case of leased properties.

Additional hospitals will be released after the first of the year, but the schedule for such release cannot be forecast at this time, General Kirk declared. "As the number of men being cared for in any hospital decrease to the point where it is uneconomical to maintain it as a separate institution, the patients and facilities are consolidated into more efficient and workable units," he explained.

The peak patient load of hospitals in the United States, reached at the end of June, 1945, was 318,000, and has been dropping slowly ever since, despite the influx of men from overseas theaters, which was more than compensated for by hospital discharges.

The Medical Department estimated that by January 1, 1946, this total will have declined to about 220,000 patients, and that by June of 1947 there will be only 70,000 men remaining in Army hospitals. —S. G. O. Notes, Nov. 15, 1945.

SENSORY AID FOR THE BLIND

Development of a sensory aid for the blind which operates on electronic principles akin to radar, and which was first initiated at the request of The Surgeon General, has reached an advanced stage, according to an announcement by the War Department.

The experimental model, weighing nine pounds and connected with a single earphone, contains a three-watt lamp which focuses a narrow ray of light through a lens. Any object within twenty feet of the device will reflect the light back toward a second lens, which, in turn, transfers the light to a photo-electric cell, divided into five units for computing distances. The cell then produces electrical bursts of energy or sound tones and these are transmitted to the ear through a standard hearing device. The handle of the device is parallel to the direction of the first light ray, enabling the user to detect, through the position of his hand, the direction of the object.

Although the laboratory model of the device has been completed and tested at Signal Corps Engineering Laboratories, it is not yet considered sufficiently perfected to be practical for use, and requires further development before being placed in production.—S. G. O. Notes, Nov. 15, 1945.

ARMY SPECIALIZED TRAINING PROGRAM

Medical students now in the Army Specialized Training Program, which is undergoing gradual liquidation, will continue training through the current fiscal year, ending June 30, 1946, with the future of the program depending upon requirements for medical officers, which will be reconsidered at that time, according to an announcement by the War Department.—S. G. O. Notes, Nov. 15, 1945.

TREATMENT OF BLACK WIDOW BITE

Two doctors reported spectacular success in the treatment of a black widow spider bite with neostigmine methylsulfate, a synthetic drug which has been noted for its effect in decreasing muscle fatigue, according to the December 8 issue of *The Journal of the American Medical Association.*

James E. Bell, Jr., M. D., Intern, Roper Hospital, and John A. Boone, M. D., Assistant Professor of Medicine at the Medical College of the State of South Carolina, wrote that since no relief was obtainable for their patient by the usual method of treatment, they used an injection of neostigmine methylsulfate with atropine, and within 15 minutes a change for the better was evident. Within one hour there was complete relief of muscle spasm and pain.

The black widow spider is widely distributed in the United States, being especially prevalent in the southern states, the Ohio valley, and the western coastal region. It is shiny and coal black and is marked with an hourglass-shaped spot of red or orange on the middle of the abdomen. It inhabits dimly lighted secluded places.

The patient, upon receiving the bite feels a sharp, stinging sensation which is very painful but lasts only a moment. Fifteen to 45 minutes later pain begins to radiate from the region of the bite. According to the authors the pain is "most severe in the abdomen and legs but also spreads generally to the back, shoulders, and arms."

Previously, neostigmine has been used in a wide variety of diseases in which muscular paralysis, spasms, tension or spasticity, and cramps were important symptoms. Investigators working with this drug have reported that patients treated with neostigmine showed relaxation of muscular spasms, relief from pain, increasing strength, and improvement in muscular coördination.

HYPERTHYROIDISM TREATMENT

A new drug, thiobarbital, has been found effective in the treatment of hyperthyroidism, an excessive activity of the thyroid gland, according to Elmer C. Bartels, M. D., of the Department of Internal Medicine at the Lahey Clinic, Boston.

Writing in the December 1 issue of *The Journal of the American Medical Association,* Dr. Bartels said that thiobarbital, in small doses, has apparently twelve times the effect of thiouracil, one of a new

group of substances with the power to decrease thyroid toxicity. The action of the drugs brings the basal metabolic rate to normal and slows the heart beat. Basal metabolism represents the energy expended to maintain respiration, circulation, and secretion.

The author stated that "28 patients with hyperthyroidism have received thiobarbital, and definite and satisfactory antithyroid response was obtained in all." Previously thiouracil, although not proved to be a curative, was used effectively to improve the condition of severely sick patients before an operation was performed.

Dr. Bartels said that the "opportune moment for our initial trial use of thiobarbital came in October, 1944, when a patient receiving thiouracil developed a fever reaction necessitating discontinuance of treatment and in whom further antithyroid therapy was thought essential before thyroidectomy."

The most effective results with thiobarbital have been obtained with the treatment of patients who were unable to tolerate thiouracil, the author said. "Of 9 patients in whom toxic reactions to thiouracil developed, 7 tolerated thiobarbital, accomplishing complete relief of hyperthyroidism."

Although response to treatment was found to be similar in every respect to that observed with thiouracil, experience has shown, Dr. Bartels said, a high frequency of reactions to thiobarbital.

RECOVERY OF STARVED CHILDREN

The success of an experiment by Sweden in coöperation with UNRRA in building up children starved by the Nazis was reported in London by Dr. R. L. Coigny, UNRRA's Medical Chief for Displaced Persons in Europe.

Many of the refugee babies, when Dr. Coigny saw them on their arrival in Sweden last June and July, were nothing but "skeletons draped with loose skin and suffering from gastro-enteritis." Of 48 he then thought could not possibly live more than a few days, 40 have become normal healthy children.

"The normalcy of these babies is now almost beyond belief," said Dr. Coigny. "The same applies to the older children. This experiment has proved again how astonishingly strong are the recuperative powers of the very young when the care given them is unusually sympathetic and generous, as well as scientific." Though not a member of the United Nations, Sweden has accepted through UNRRA a total of 31,000 slave laborers and war victims who were in especially bad health when liberated from Nazi prison camps last spring. The Swedes provided the refugees with a diet of 4,800 calories daily, although the normal ration for Swedish citizens is only 3,800.

"Of course this rich diet caused some digestive disturbances," explained Dr. Coigny, "but these difficulties are of little consequence compared with the overall results. The enjoyment of plenty following the privation and suffering experienced by these people under the Nazis has not only rehabilitated them physically at an unusual rate, but has also helped restore their mental health with remarkable rapidity."

DIRECTORY OF APPROVED SURGICAL TRAINING PLANS

Chiefly as an aid to medical officers returning from war duty, the American College of Surgeons has published a 424-page directory in which are listed and described the approved programs of graduate training in surgery in 240 civilian hospitals in the United States and Canada, and in 32 Naval, 7 Veterans Administration, and 10 U. S. Public Health Service hospitals.

The total number of approved training plans in the 289 hospitals is 228 in general surgery and 522 in the surgical specialties—fractures, plastic surgery, proctology, thoracic surgery, neurological surgery, orthopedic surgery, urology, obstetrics and gynecology (combined and separately), and ophthalmology and otolaryngology (combined and separately). In these 750 training plans, approximately 2,000 surgeons may be trained, whereas, as the College points out, training facilities for at least 5,000 are urgently needed for returning medical veterans whose training in surgery was interrupted by their military service. Publication of the directory is expected to stimulate the formation of additional programs of training in suitable hospitals, according to Dr. Irvin Abell, Chairman of the Board of Regents.

The descriptions of the approved programs include information about the size and type of hospital, organization of the medical staff, facilities for study of the basic medical sciences in their application to surgery, library facilities, clinical material, manner of selecting individuals for training in surgery, scope and method of surgical training, supervision by the medical staff, examination and thesis requirements, and provision, if any, for conferring higher medical degrees.

DIPHTHERIA IN EUROPE

Diphtheria, which reached epidemic proportions in a large part of central and northern Europe in 1942 and 1943, continues to be the leading epidemic disease and is still increasing rapidly in both Finland and Germany, an UNRRA Epidemiological Bulletin reports.

In Holland diphtheria has become one of the chief causes of death, as far as infectious diseases are concerned, second only to tuberculosis. France, Czechoslovakia, Belgium, and Austria continue to have high morbidity and mortality rates from diphtheria. Only in Norway has the diphtheria wave reached its peak and begun to subside. The United Kingdom and Hungary have been able to continue methods of immunization in use prior to the war, and have a comparatively low number of diphtheria cases.

That the diphtheria epidemic is not confined to the Western World is proved by reports of Japanese civilian officials to the Pacific Office of the Chief Surgeon, U. S. Army, which show that diphtheria is the most important epidemic disease in Japan. The Philippines also have a large number of cases.

PLAN OF OUT-PATIENT CARE FOR VETERANS

The outlines of the following plan were taken verbatim from a statement presented by a Delegate from New Jersey to the House of Delegates of the American Medical Association meeting in Chicago, December 3-5, 1945, which was referred to a reference committee dealing with the address of Major General Paul R. Hawley to the House of Delegates and the several resolutions on medical care of veterans.

"1. All members of the Monmouth County Medical Society and of other county medical societies in New Jersey who are designated by the Monmouth County Medical Society will, with their consent, be designated as part time physicians of the Veterans Administration.

"2. The Monmouth County Medical Society will establish in such hospitals as it may determine triage or sorting clinics. Such clinics will be open for the examination of veteran patients at such times as the need indicates, probably once each week or more often. Each such clinic will be staffed by such specialists as are indicated after a trial. The function of these clinics is (a) to determine by examination

whether or not the veteran needs treatment, (b) to determine what such treatment should be and where it should be given and (c) in cases in which treatment is authorized by the Veterans Administration, to refer the patient to the proper physician or hospital for such treatment.

"3. The Monmouth County Medical Society will form a disciplinary or reference committee to see that the patient receives the treatment indicated by the designated physician and to pass on complaints from all sources.

"4. The Monmouth County Medical Society will operate this program for a trial period not to exceed three months, without pay, except that physicians giving treatment authorized by the Veterans Administration will be paid fees. The Monmouth County Medical Society will submit to the Veterans Administration a schedule of fees which its members believe to be reasonable and just, and the Veterans Administration, after consultation with the society, if necessary, will determine the schedule of fees to be paid. Except for the payment of authorized service to patients, the Veterans Adminisitration will not be obligated financially during this trial period.

"5. The Veterans Administration will provide the proper liaison and facilities for making prompt decisions as to service connection in each of the clinics.

"It is also anticipated that the foregoing program will be correlated with the Veterans Administration plans to use local hospital facilities, both general and specialized. The veteran hospitalized in a general hospital would be treated by a designated physician who is also a member of the staff of that hospital. Other arrangements will have to be made regarding specialized hospitals, such as nervous and mental, having full time closed staffs.

"It should be noted that in the foregoing plan every effort is being made to utilize the services of veteran physicians, both as designated physicians and as members of the clinic staff. The proposal to have the clinic staff made up of specialists follows the previous practice of the Veterans Administration, and it is felt to be the quickest and most efficient way of arriving at exact diagnosis. Treatment will be put in the hands of the general practitioner whenever possible."

AMERICAN BOARD OF OPHTHALMOLOGY

Because of transportation difficulties, the examination of the American Board of Ophthalmology originally scheduled for Los Angeles, January 28-31 has been changed to San Francisco, June 22-25, inclusive. Other 1946 examinations have been scheduled for Chicago, January 18-22; New York, April approximately 10-13; Chicago, October 9-12.

A new ruling requires that previously accepted candidates mail their lists of surgery to the Board office at least sixty days prior to their examination. All new applicants are now required to send their list with application.

HOSPITALS NEEDING INTERNS AND RESIDENTS

Methodist Hospital, Dallas. Capacity 206 beds. C. W. Sensenbach, M. D., Medical Director; (4 interns now).

AMERICAN COLLEGE OF PHYSICIANS

The American College of Physicians will resume its annual meetings in 1946 and has chosen Philadelphia, May 13-17 for the session. Headquarters will be at the Philadelphia Municipal Auditorium.

A. M. A. COUNCIL REPORTS

COUNCIL ON PHARMACY AND CHEMISTRY

New and Nonofficial Remedies

The following additional articles have been accepted as conforming to the rules of the Council on Pharmacy and Chemistry of the American Medical Association for admission to New and Nonofficial Remedies. A copy of the rules on which the Council bases its action will be sent on application.

Austin Smith, M. D., *Secretary.*

Yeast Extract Containing Vitamin B Complex (See New and Nonofficial Remedies, 1944, p. 606).

The following dosage form has been accepted:

McNeal Laboratories, Inc., Philadelphia

Brewers' Yeast Tablets: 0.32 Gm. Each tablet contains brewers' yeast 0.32 Gm., providing thiamine hydrochloride 0.167 mg. (55.5 U. S. P. units), riboflavin 0.023 mg. and niacin 0.195 mg.

Preparation.—

Dried Brewers' Yeast—U. S. P.—Granulated with a mixture of calcium carbonate, starch, sodium chloride, dried malt syrup, saccharin, vanillin, oil of chocolate and talc. The mixture is compressed into tablets.

Penicillin (See the Supplement to New and Nonofficial Remedies, 1944, p. 18).

The following dosage form has been accepted:

William R. Warner & Co., Inc., New York

Penicillin Sodium: 100,000 Oxford Unit ampuls.

Hexestrol (See J. A. M. A., Dec. 9, 1944, p. 961).

The following additional dosage form has been accepted:

The Wm. S. Merrell Company, Cincinnati

Solution Hexestrol in Oil 5 mg per cc.: 20 cc. ampuls. Preserved with 0.5 per cent chlorobutanol.

Riboflavin (See New and Nonofficial Remedies, 1944, p. 613).

The following dosage form has been accepted:

Lakeside Laboratories, Milwaukee

Tablets Riboflavin: 5 mg.

Contraceptive Diaphragms (See New and Nonofficial Remedies, 1944, p. 340).

The following product has been accepted:

Contra Creme and Diaphragm Co., Severna Park, Md.

U. S. trademark 355,838.

Contra Diaphragm: Latex rubber diaphragm covering a spiral spring, the external diameter varying in gradations of 5 mm. from 50 to 95 mm.

—J. A. M. A., Sept. 1, 1945.

Intocostrin.—A curare preparation containing therapeutically desirable constituents of curare.

Actions and Uses.—Intocostrin has been shown by physiologic tests to have substantially pure curare action; that is, it paralyzes the skeletal muscles. This paralysis results from an interruption of the nerve impulse at the myoneural junction. The diaphragm and intercostal muscles are usually the last to be affected. The action of the drug is brief because of rapid excretion and destruction. If respiration is embarrassed or arrested, neostigmine, a physiologic antidote, will assist in counteracting the curare effect, but properly instituted artificial respiration may be necessary to maintain respiration until the curare effect has diminished. The curare activity in intocostrin is due almost wholly to the presence of an alkaloid, d-tubocurarine, which accounts for about half of the total solids in intocostrin. This alkaloid has been isolated as a pure crystalline salt. Intocostrin may be used to soften the severity of convulsions and to prevent fractures in shock therapy of mental diseases; to produce muscular relaxation dur-

ing the reduction of fractures or dislocations, or during certain manipulative diagnostic procedures; to produce a more or less transient reduction of hypertonia, tremor, incoordination, athetosis and dysarthria in certain neurologic conditions and, with certain precautions, to aid in the diagnosis of myasthenia gravis.

Intocostrin can be used by those experienced in such use as an adjuvant to anesthesia. *The drug is not, however, without its dangers.* Overdosage produces paralysis of the respiratory muscles. Experimental work on dogs indicates the possibility of added toxic effects following the use of large doses of atropine with curare. Clinically, however, no difficulty has been encountered with therapeutic doses of belladonna alkaloids, and it is claimed that such premedication is desirable. The value of intocostrin in anesthesia is the development of adequate muscular relaxation. It is claimed that the amount of anesthetic and depth of anesthesia may be decreased.

Dosage.—In softening the convulsions of shock therapy or to produce relaxation in manipulative procedures: 0.5 unit per pound of body weight (but the initial dose for adults should be 20 units less than this total), administered intravenously at a uniform rate during one to one and one-half minutes. Larger doses may be necessary, but if the estimated dose fails to produce paralysis another full paralyzing dose should not be given for twenty-four hours. Preparations should always be made to cope with respiratory failure. Neostigmine, 2 cc. of 1:2,000, should be at hand for intravenous injection if required, and an airflow should be available on the tray to assist in artificial respiration in the event of obstructed breathing. In spastic and athetoid states in children: 0.5 to 1.5 units per pound of body weight administered intramuscularly at four day intervals. As a diagnostic agent in myasthenia gravis: one fifteenth to one fifth of the average adult dose, intravenously followed always in two or three minutes by the intravenous injection of 1.5 mg. of neostigmine methylsulfate with 0.65 mg. of atropine sulfate.

In order to obtain muscular relaxation during light (second plane) anesthesia with cyclopropane, nitrous oxide or barbiturates, 40 to 60 units of intocostrin may be administered when the skin incision is made: 20 to 30 units may be added in three to five minutes, if needed. If the operation has lasted more than forty-five minutes, an additional dose of 30 to 40 units may be cautiously administered if such additional dosage seems indicated. In an alternative method as much as 100 units has been administered in a single intravenous injection at the beginning of or during anesthesia, but no additional quantities should be given following this large dose until some time has elapsed and then extreme caution exercised. The drug apparently may be used with any type of anesthetic agent, *although with ether only about one third of the dose otherwise employed should be used.* It must be remembered, however, that the use of intocostrin as an adjuvant to surgical anesthesia is still in a stage which requires continued careful study.

Curare has been extensively used with sodium pentothal anesthesia, usually by separate injection. If a barbiturate solution (alkaline) is mixed with intocostrin solution (acid) a precipitate is formed, which is redissolved when a sufficient amount of the barbiturate with its buffer has been added. The precipitate is the free barbituric acid derivative. If an intocostrin solution is alkalized with sodium carbonate, no loss in potency occurs during a twenty-four hour period and no precipitate forms when the alkalized solution is mixed in any quantity with a barbiturate solution. Such mixtures have not been used clinically; the present method is to inject the solution separately and alternately through a Y-tube using the same needle. When by this method intocostrin follows the barbiturate, a slight fine precipitate forms at the surface of contact of the two solutions. It has been the custom to allow such a precipitate to be injected slowly as it presumably redissolves on mixing with the plasma.

Preparation.—

Intocostrin prepared from Chondodendron tomentosum extract is made by first extracting with alcohol a desiccated curare obtained from a heavy syrup of the bark and stems of Chondodendron tomentosum. The alcoholic extract is evaporated to dryness; a sterile filtered solution having a *pH* of 4.6-4.8 is made and adjusted to a standard potency of 20 units per cubic centimeter. The final solution contains sodium chloride 0.45 per cent and trichlorobutanol 0.5 per cent; sterlized by filtration and its *pH* again adjusted to 4.6-4.8.

In the preparation of intocostrin from pure d-tubocurarine chloride crystals, the crystals are obtained from the desiccated curare or from the crude syrup.

Tests and Standards.—

Dilute in a large pyrex test tube 0.25 cc. of intocostrin with 25 cc. of distilled water and add 0.2 cc. of concentrated sulfuric acid and 2 cc. of 1 per cent potassium iodate solution. Mix and warm in a water bath at 50 C. for one-half hour. A yellow color is developed.

The physiologic activity of intocostrin is determined on rabbits: the provisional unit is equivalent to the potency of 0.15 mg. of d-tubocurarine chloride.

E. R. Squibb & Sons, New York

Intocostrin Solution: 10 cc. vials. Each cubic centimeter contains an amount of intocostrin equivalent to 20 units: sodium chloride 0.45 per cent and chlorobutanol 0.5 per cent as a preservative.

Nikethamide (See New and Nonofficial Remedies, 1944, p. 330).

The following dosage form has been accepted:

George A. Breon & Co., Kansas City, Mo.

Sterile Solution Nikethamide 25% W/V: 1½ cc. ampuls.

Sulfadiazine (See New and Nonofficial Remedies, 1944, p. 178).

The following dosage form has been accepted:

American Pharamaceutical Co., Inc., New York

Tablets Sulfadiazine: 0.5 Gm.

Diethylstilbestrol (See New and Nonofficial Remedies, 1944, p. 417).

The following additional dosage forms have been accepted:

George A. Breon & Co., Kansas City, Mo.

Tablets Diethylstilbestrol: 5.0 mg.

Caplets Diethylstilbestrol: 5.0 mg.

Penicillin (See Supplement to New and Nonofficial Remedies, 1944, p. 18).

The following dosage form has been accepted:

Smith-Dorsey Company, Lincoln, Neb.

Penicillin (Sodium Salt): 100,000 Oxford unit vials and 100,000 Oxford unit vials packaged with an accompanying 20 cc. vial of isotonic solution of sodium chloride.

Chas. Pfizer & Co., Inc., Brooklyn

Penicillin Calcium: 200,000 Oxford Unit bottles.

Sulfanilamide (See New and Nonofficial Remedies, 1944, p. 184).

The following additional dosage form has been accepted:

The Smith-Dorsey Co., Lincoln, Neb.

Sulfanilamide *(Powder):* 5 Gm. vials.

Sufathiazole (See New and Nonofficial Remedies, 1944, p. 191).

The following additional dosage form has been accepted:

The Smith-Dorsey Co., Lincoln, Neb.

Sulfathiazole *(Powder):* 5 Gm. vials.

—J. A. M. A., Oct. 13, 1945.

Drugs Sold in Foreign Countries

The following statement has been authorized for publication by the Council.

From time to time the Council office has been requested to supply information on drugs which are

made available in other countries. Many of these inquiries arise because of treatment undergone by patients from other countries, because of drugs used by physicians who have resided in other countries but who are now in the United States and because of publicity given by the press to drugs developed or sponsored elsewhere. Drug and pharmaceutical manufacturers and distributors in the United States are invited to supply information concerning the names, actions and uses, American equivalents and other useful data so that the files of the Council office may be as complete as possible and so the best information service can be provided to its inquirers. At the same time readers of this column are invited to make use of the information in the Council files by directing inquiries to the Secretary of the Council, in care of the American Medical Association, 535 North Dearborn Street, Chicago 10.—J. A. M. A., Nov. 17, 1945.

Information on New Drugs

The following statement has been authorized for publication by the Council.

The Council office receives many inquiries concerning the status of drugs newly introduced in commerce and those which are still in the stage of experimental investigation. On the basis of the information which is available in the Council files and that received from consultants to whom the Council may write, these inquiries are answered. However, to give the best information service it is necessary to have the coöperation of those who are responsible for the introduction and distribution of new drugs, and it is important that such information is received as promptly as possible. Manufacturers and others are urged to keep the Council office informed concerning new developments relating to products in which they are interested. At the same time they should of course notify the Council office if there is any restriction on the information, as such restriction will be observed. Ordinarily it is necessary to transmit a digest of the information only when replying to inquiries, but it should be understood that the Council must be free to comment on the supplied data if the occasion arises for such comment; while these comments would aim to be unbiased, they may on occasion be adverse because, for example, of the lack of evidence to support the claims or implied uses. Nevertheless, the end result would be more complete information and a better understanding of the problems involved. Every one participating in the accumulation of this information would benefit. Manufacturers are invited to keep the Council informed; at the same time members of the medical profession and others with similar interests are also invited to make use of the information available in the Council files. Inquiry may be directed simply to the Secretary of the Council on Pharmacy and Chemistry, in care of the American Medical Association, 535 North Dearborn Street, Chicago 10.—J. A. M. A., Nov. 24, 1945.

COUNCIL ON PHYSICAL MEDICINE

The Council on Physical Medicine has authorized publication of the following report.

Howard A. Carter, *Secretary.*

Maico Type K Vacuum Tube Hearing Aid Acceptable

Manufacturer: Maico Company, Inc., 21 North Third Street, Minneapolis.

The Maico Type K is a three tube vacuum tube instrument consisting of a transmitter and amplifier case, a battery unit and an air or bone conduction reproducer.

Physical dimensions: Case, 4⅝ inches by 2⅜ inches by 15/16 inch; 45 volt B battery: 3 15/16 inches by 2 inches by 1⅜ inches; 1½ volt A battery: 3 13/16 inches by 1 1/16 inches (rod shaped).

Weight: Transmitter and amplifier case, 7 ounces; 45 volt B battery, 9 ounces; 1½ volt A battery, 4 ounces; total weight of instrument 20 ounces.

Current consumption: A battery, 70 milliamperes at 1.5 volts; B battery, 1.7 milliamperes (with 1.5 volt A battery). The current drain is independent of the volume control setting.

Acoustical gain for speech: With large crystal receiver (1 inch diameter) and full volume, 45 decibels. This gain represents the average gain for three individuals, each of whom had losses of from 40 to 50 decibels for air conduction from 256 to 2,048 cycles. These individuals perceived speech through a high quality sound reproduction system at an average level of 45 decibels less intensity with the hearing aid than without it.

Acoustical gain for pure tones:

Frequency:	250	500	1,000	2,000	3,000	4,000	5,000
Full gain in decibles	29	32	45	56	47	33	17

These values were obtained with the large size crystal receiver, the tone controls being adjusted for maximum low and maximum high frequency response. The measurements were obtained with an artificial ear. The hearing aid was mounted on a body baffle.

Physical and mechanical features: The transmitter and amplifier case consists of a rectangular black plastic case of pleasing and more or less conventional design. A combined volume control and on-off switch, a round knurled molded plastic wheel, is conveniently located on the top of the case. The high frequency tone control adjustments are made by the insertion of small screws in the back of the instrument and the low compensation by the insertion of screws in the front of the chassis, accessible only by taking apart the case. The instrument has both high and low impedance output, enabling one model to be used with crystal or magnetic air conduction receivers or with high or low impedance bone conduction reproducer.

Performance: The instrument operates in an entirely satisfactory manner. There is a minimum of inherent amplifier, case and cord noise. The frequency compensation controls perform as represented.

Recommendations: The Council on Physical Medicine voted to include the Maico Type K Vacuum Hearing Aid in its list of accepted devices.—J. A. M. A., Sept. 1, 1945.

COUNCIL ON FOODS AND NUTRITION

Accepted Foods

The following additional foods have been accepted as conforming to the Rules of the Council on Foods and Nutrition of the American Medical Association for admission to Accepted Foods.

George K. Anderson, M. D., *Secretary.*

Preparations Used In the Feeding of Infants (See Accepted Foods, 1939, p. 156).

Beech-Nut Packing Company, Canajoharie, N. Y.

Beech-Nut strained pears and pineapple, consists of Bartlett pears, pineapple, sugar and water.

Analysis (submitted by manufacturer).—Total solids 16.72%, moisture (by difference) 83.28%, ash 0.22%, fat (ether extract) 0.31%, protein (N × 6.25) 0.34%, crude fiber 1.10%, carbohydrates other than crude fiber (by difference) 14.75%, calcium (as Ca) 0.014%, phosphorus (as P) 0.009%, iron total 0.54 mg. per hundred grams, iron "available" (bipyridyl

method) 0.55 mg. per hundred grams, copper (McFarlane method) 0.15 mg. per hundred grams.

Calories.—18 per ounce; 63 per hundred grams.
Vitamins.—Vitamin A equivalent ..... 26 U. S. P. units per hundred grams
Thiamine ..... 0.24 mg. per hundred grams
Ascorbic acid ..... 0.2 mg. per hundred grams
Riboflavin ..... 0.017 mg. per hundred grams
Niacin ..... 0.33 mg. per hundred grams

BEECH-NUT PACKING COMPANY, CANAJOHARIE, N. Y.

Beech-Nut strained pears, consists of pears, sugar and water.

Analysis (submitted by manufacturer).—Total solids 13.54%, moisture (by difference) 86.46%, ash 0.20%, fat (ether extract) 0.37%, protein (N × 6.25) 0.31%, crude fiber 1.02%, carbohydrates other than crude fiber (by difference) 11.64%, calcium (as Ca) 0.016%, phosphorus (as P) 0.009%, iron total 0.44 mg. per hundred grams, iron "available" (bipyridyl method) 0.33 mg. per hundred grams, copper (McFarlane method) 0.23 mg. per hundred grams.

Calories.—14 per ounce; 51 per hundred grams.
Vitamins.—Vitamin A equivalent ..... 430 U. S. P. units per hundred grams
Thiamine ..... 0.011 mg. per hundred grams
Ascorbic acid ..... 0.5 mg. per hundred grams
Riboflavin ..... 0.015 mg. per hundred grams
Niacin ..... 0.27 mg. per hundred grams

—J. A. M. A., Sept. 8, 1945.

LIBRARY NOTES

The package library consists of collections of reprints and other periodical material on various subjects, prepared for lending to members of the Association. Requests for packages should be addressed "Library, State Medical Association of Texas, 1404 W. El Paso Street, Fort Worth 3, Texas." Twenty-five cents in stamps should be enclosed with the request to cover postage and part of the expense of collecting the material. Only one package may be borrowed at a time, and packages are allowed to remain in the hands of the borrower for 14 days.

PACKAGE SERVICE

Packages were mailed from the Library of the State Medical Association to the following during December:

Southwestern Medical Library, Dallas—(1 journal).

Dr. F. R. Rugeley, Wharton—(2 journals).

Crystal Hospital, Crystal City—*Histamine, therapy* (14 articles).

Dr. V. A. Black, Wharton—*Sclerosis, disseminated* (11 articles).

Dr. Paul K. Conner, Jacksboro—*Bandages* (22 articles).

Dr. R. A. Neblett, Canyon—*Undulant Fever, therapy* (11 articles).

Dr. Holloway Bush, Macon, Ga.—*Physicians* (5 articles); (1 journal).

Dr. W. R. Jamieson, El Paso—*Urethra, inflammation* (11 articles).

Dr. P. L. Allen, Weatherford—*Arthritis* (6 articles); *Migraine* (7 articles); *Aneurysm* (7 articles); *Blood Pressure, high* (11 articles); *Infants, feeding* (5 articles); *Peptic Ulcer* (4 articles); *Penicillin* (4 articles); *Gonorrhea* (5 articles).

Dr. F. P. Miller, El Paso—(2 journals).

Drs. Lamm & Lamm, La Feria—(1 journal).

Dr. I. F. Cannon, Mart—(3 journals).

Dr. Russell Holt, El Paso—*Histoplasmosis* (11 articles).

Major O. Theodore Roberg, Fort Sill, Okla.—*Chylothorax* (12 articles).

Dr. Hubert Seale, Abilene—(7 journals).

Dr. L. B. Woods, Lubbock—*Mononucleosis, infectious* (22 articles).

Dr. James I. Pabst, Wichita Falls—*Encephalitis, epidemic* (26 articles).

Dr. Charles W. Pemberton, Houston—*Orthopedics, progress* (5 articles).

ACCESSIONS

Philadelphia, The Blakiston Company—Mackenzie: Men Without Guns.

Houston, M. D. Anderson Hospital Publications—The Manual of The M. D. Anderson Hospital for Cancer Research.

SUMMARY

REPRINTS RECEIVED, 1,483. LOCAL USERS, 33.
JOURNALS RECEIVED, 178. BORROWERS BY MAIL, 18.
ITEMS CONSULTED, 413. PACKAGES MAILED, 26.
ITEMS TAKEN OUT, 84. ITEMS MAILED, 185.
TOTAL ITEMS CONSULTED AND LOANED, 622.

MOTION PICTURE LENDING LIBRARY

Motion picture films on medical subjects, 16 mm., both silent and sound, some in color, and suitable for either medical or lay audiences, are available for loan to county medical societies, hospital staffs, or individual physicians, on request. Borrowers will be required to pay only the cost of shipment of the films, by express, with insurance, and for any damage to films while in the hands of the borrower.

Requests for films should be addressed to "Motion Picture Lending Library, State Medical Association of Texas, 1404 West El Paso Street, Fort Worth 3, Texas." A list of available films, with descriptions, will be furnished on request.

The following motion picture films were loaned by the Motion Picture Lending Library of the State Medical Association during December:

Blood Transfusion (Available through the courtesy of British Information Services.)—Gregg County Medical Society, Longview.

Breech Extraction With Forceps (Available through the courtesy of Mead Johnson & Company.)—The Sanitarium Staff, Paris, and St. Joseph's Hospital Staff, Fort Worth.

NEWS

Contributions to this department will be appreciated. News should be of general medical interest, such as public health activities, new hospitals, personal items of more than local value, etc. News for a particular number of the JOURNAL should be in the hands of the Editor not later than the fifteenth of the preceding month.

Dr. Henry Houston Ogilvie, late San Antonio physician, was honored November 20 by his former associates in the Emergency Medical Service, Office of Civilian Defense in San Antonio when they presented that agency's surplus fund, accumulated through various benefit lectures and wartime salvage drives, to Robert B. Green Memorial Hospital to buy surgical instruments. With the more than $5,000 went a plaque inscribed, "In Memory of Dr. Henry Houston Ogilvie, Given by Members of the Emergency Medical Service."

Dr. Ogilvie served as chairman of the Emergency Medical Service early in the war, organizing and equipping 84 first aid medical and surgical units with 1,824 beds for use in event of air raids. He also initiated the civilian blood bank in San Antonio. For his foresight, organizing skill, and leadership, Dr. Ogilvie received a citation from the Office of Civilian Defense in Washington.—*San Antonio Express.*

Concentration of all Army Medical Training Facilities at Fort Sam Houston, proposed by the Surgeon General recently, has been protested by Senator Myers, of Pennsylvania, the San Antonio *Express* informs. Under the recommendation made by the Surgeon General, the pioneer medical training school at Carlisle, Pa., along with other such units, would be transferred to Fort Sam Houston.

The City-County Tuberculosis Hospital, of Laredo, was taken over by the state November 1 by transfer from the former board of trustees, reports the Fort Worth *Star-Telegram.*

Federal Aid for Hospital Construction was approved December 11 by the Senate, advises the Houston *Chronicle*. The Associated Press release names Texas' share as $5,238,000 annually for the next five years, provided the state furnishes $1,349,000.

The so-called Hill-Burton bill has yet to pass the House of Representatives and be signed by the President, but Representative Priest (Tennessee), author of a similar bill in the House and chairman of a public health subcommittee, predicted passage by the House. He planned to call hearings on the bill soon after the Christmas recess. Both Representative Priest and Senators Hill (Alabama) and Taft (Ohio) protested efforts by Senators Wagner (New York), Murray (Montana), and others to broaden the Hill-Burton bill to include the national health program recently advocated by President Truman.

As passed by the Senate, the hospital bill authorizes use of $380,000,000 in federal funds, $5,000,000 for immediate surveys of hospital needs and $75,000,000 annually for each of the next five years for construction. The federal share in any project under the bill would vary according to a state matching formula based on whether an individual state is considered "poor" or "rich." The federal government could contribute from one-third to three-fourths of costs involved.

New Hospitals.—Offer of State Senator Fred Mauritz and T. N. Mauritz, Ganado, and their brother, Harry Mauritz, Edna, to build a hospital in Jackson County, provided the county will equip and operate it, is under consideration by the county, states the Dallas *News*. The hospital, which would be built between Ganado and Edna, would be a memorial to the late parents of the Mauritz brothers, Mr. and Mrs. N. P. Mauritz, who came to the United States from Sweden, going first to Iowa and Nebraska and then settling in Jackson County, Texas, in 1893. The proposed hospital would cost $75,000 to erect. The county is considering a bond issue of $25,000 with which to equip it.

Construction of the first hospital in Van Zandt County is under way at Wills Point, informs the Wills Point *Chronicle*. The white brick, single story building is being erected by Dr. H. A. Baker, who has practiced in Wills Point for fourteen years. The hospital, a $50,000 project, will have space for ten beds, nurses' quarters, office, operating room, reception room, nursery, and other accommodations, which will be available to any reputable physician.

Dallas Health.—The proposed merger of city and county health departments in Dallas has been approved by Dr. Horace Duncan, county health officer who recently returned to duty after three and a half years with the Navy. State legislation, perhaps a constitutional amendment, would be required to set up Dallas County as an independent health district, and a health tax should be levied to back up the program, Dr. Duncan said. He recommended a survey of health and sanitary conditions in Dallas County, taking into consideration the present duties of city and county departments, as a means of educating citizens on the proposal.—*Dallas News*.

More Office Space for Dallas Physicians has been assured by the proposed construction of a new Doctors Building at the corner of Gaston and Adair and of a new annex to the Medical Arts Building, according to the Dallas *News*.

The Doctors Building will be a two-story, Spanish type structure costing $500,000. Construction was scheduled to start January 1. Dr. E. O. Rushing indicates the building will be especially designed for the use of doctors and will be limited to them.

An eighteen-story addition to the Medical Arts Building will make it the largest medical office building in the world, E. H. Cary, Jr., has announced. The new structure, to be begun as soon after January 1 as material is available, will add 100,000 square feet to the present available space and will cost more than $1,500,000. It is also planned to erect a four-story garage adjacent to and connected with the present building and annex to take care of 700 automobiles of physicians and their patients at a nominal charge, also relieving the traffic congestion in that area.

Space for Doctors' Offices in Beaumont was released recently by the removal from the Goodhue Building of rent control offices, and it was expected that additional space would soon be made available by removal of offices of the War Manpower Commission, states the Beaumont *Enterprise*. Return to civilian practice of physicians who have been in service created a serious shortage of office space, and when the county commissioners offered the rent control staff quarters in the county courthouse, steps were immediately taken by the rent control officials to secure approval from Washington for the move. Removal of both government agencies will make available space for seven or eight physicians.

A San Antonio Medical Center is being planned by citizens of that city working through a chamber of commerce public health committee, states the San Antonio *Express*. The committee is working toward the eventual coordination of all the existing medical facilities in the city plus an expansion of them. Committee members point out that such coordination would take the form of five establishments all working together.

First step would be the establishment of a diagnostic clinic to be staffed by a group of specialists in various branches of medicine. The work would be on a coöperative basis and money for the clinic would be secured from philanthropists so that costs to patients could be kept at a minimum.

Second step would be the incorporation of denominational hospitals into the plan. Church programs, the committee believes, might specialize in certain cases in a children's hospital or an isolation hospital.

Third step would involve enlargement or rebuilding of the present public charity hospitals. Taxes for the operation of a hospital of at least 600 beds were provided for by voters in an election last July. It is possible additional funds might be secured from the federal government.

Fourth item would be establishment of a tuberculosis hospital. Such a hospital might be included in present public hospital facilities. Funds are now available from a bond issue of several years back for erection of building facilities, and again federal aid might be obtained.

Fifth unit is a San Antonio branch of a medical school. The committee members feel that establishment of San Antonio as an important public health center should attract a medical school.

A starting fund for the coördination of the medical center has been tentatively placed at $1,000,000, most of which it is believed could be obtained through private donations.

Additional Funds for Houston's Health Department are needed, believes Dr. Austin E. Hill, city health officer. In a report in the Houston *Chronicle* Dr. Hill asserted that $160,000 a year more than the $428,000 available in the year just past from city, state, and federal grants could be spent profitably.

At present the city has a 91 cents per capita health budget. The National Board of Health recommends $1 per capita for a public health budget, Dr. Hill said. He, however, based his recommendation on a per capita expenditure of $1.25. He pointed to the record in typhoid fever and typhus fever in Houston to show what the expenditure of

money can do. During 1945 a $50,000 general sanitation program was carried out. Typhus fever has dropped from 130 cases and 6 deaths at the same time last year to 89 cases and 3 deaths now, while typhoid fever has been cut from 26 cases and 4 deaths to 15 cases and 3 deaths.

Texas Medical Center.—Dr. E. W. Bertner, acting director of the M. D. Anderson Hospital for Cancer Research and trustee of the State Medical Association, has been elected president of the Texas Medical Center, informs the Houston *Chronicle*, with John Freeman, member of the Anderson Foundation and of the law firm of Fullbright, Crooker, Freeman & Bates, as vice-president, Dr. Frederick C. Elliot, dean of the University of Texas School of Dentistry, as secretary; and James Anderson, vice-president of Hermann Hospital and former vice-president of Humble Oil and Refining Company, as treasurer.

Directors of the center are Hines Baker, executive vice-president of Humble Oil and Refining Company and a member of the Methodist Hospital board; William B. Bates, chairman of the Anderson Foundation and member of the law firm of Fullbright, Crooker, Freeman & Bates and chairman of the board of the Second National Bank; Ray L. Dudley, Gulf Publishing Company president and a member of the Baylor University board and Hermann Hospital; Bishop Clinton S. Quin of the Episcopal Diocese of Texas and member of St. Luke's Hospital board; H. M. Wilkins, president of the State National Bank and a member of the Anderson Foundation; Leland Anderson, vice-president of Anderson, Clayton & Co.; Dr. Elliott; Dr. Bertner; Mr. Freeman; and Mr. Anderson.

A proposal that the Texas Methodist Conference raise $1,000,000 to build a 300-bed hospital in the Texas Medical Center was made at the annual meeting of the conference in Houston in November, states the Houston *Chronicle*. The proposal was made by Raymond Elledge, chairman of the board of Methodist Hospital, who called the attention of the delegates to the $1,000,000 gift already received for the hospital by Mr. and Mrs. H. R. Cullen, of Houston, and the pledge of the Anderson Foundation to contribute half as much as is raised for the hospital fund. Mr. Elledge declared the Houston district of the conference would raise $750,000 of the $1,000,000 needed and challenged the other nine districts to raise the remaining $250,000.

Baylor University.—Contracts for construction of the Baylor University College of Medicine at the Texas Medical Center in Houston has been let, according to the Houston *Press*, at an aggregate of $1,237,487. Site for the building has been decided upon, about 500 feet south of the present Hermann Hospital, and construction will begin shortly. The contract calls for completion of the building within 300 calendar days from the starting date. The Baylor building, which will be the second Medical Center structure, the first being the Navy Hospital now nearing completion, will be E-shaped. The central stem of the E will have four stories, the auditorium in the central portion will be the equivalent of three stories, and the remainder of the building will be two stories in height. Plans are to accommodate 320 students, with lecture rooms, laboratories, and research workshops arranged for that number. Foundations of the building will be of Texas granite. The building proper will be reinforced concrete faced with Texas limestone.

Dr. C. C. Sturgis, chairman of the University of Michigan Medical Department, professor of internal medicine there, and a director of the Thomas Henry Simpson Memorial Institute for Medical Research, was the first lecturer brought to Baylor University College of Medicine under the lectureship established recently by the Medical Alumni Faculty Foundation to honor alumni lost in World War 2, according to the Houston *Post*. Dr. Sturgis met with students and staff members at Hermann Hospital and Jefferson Davis Hospital for ward rounds and clinical conferences December 3 and 4, and lectured on anemias at the College December 5. He also appeared before the Harris County Medical Society that evening.

Baylor University College of Medicine and affiliated hospitals are offering a refresher course in general practice from January 7 to April 13, 1946. The course is arranged as follows:

Medicine.—Weeks of January 7, 14, 21, and 28: morning, ward rounds and clinics; afternoon, lectures and conferences.

Surgery.—Weeks of February 4, 11, and 18: morning, surgery and clinics; afternoon, lectures and conferences.

Obstetrics.—Weeks of February 25 and March 4: morning, deliveries and ward rounds; afternoon, lectures and conferences.

Pediatrics.—Weeks of March 11 and 18: morning, ward rounds and clinics; afternoon, lectures and conferences.

Otology, Ophthalmology, Urology, Psychiatry, Neurology, Proctology, Orthopedics, and Radiology.—Weeks of March 25 and April 1 and 8: lectures, clinics, and conferences.

Inquiries may be addressed to Miss Lela W. Bentley, Registrar, Baylor University College of Medicine, Houston, Texas.

University of Texas.—Three postgraduate courses are planned for next spring at the University of Texas School of Medicine, reports from the School and from the Galveston *Tribune* indicate. They are as follows:

Physical Medicine.—A four-day conference on physical medicine will be held March 4-7, under the sponsorship of the Baruch Committee on Physical Education of New York City. Physical diagnostic and therapeutic agents, including physiotherapy, radiation therapy and the use of radio-active substances, fever therapy, heat, and ultraviolet rays will be discussed. The fourth day of this conference will be devoted to the subject of rehabilitation, in conjunction with the meeting of the Texas Society for Mental Hygiene to be held March 7-8. The rehabilitation program will be sponsored in part by the State Department of Education, Division of Rehabilitation, under the direction of J. J. Brown, Austin. Physicians, physiotherapists, and others interested in the physical medicine conference should communicate with Dr. George M. Decherd, director of the Post-Graduate Division, University of Texas School of Medicine, Galveston.

Neuropsychiatry.—A conference March 8-10 on neuropsychiatry will be held under the partial sponsorship of the Hogg Foundation for Mental Hygiene. Dr. Jack Ewalt, professor of neuropsychiatry at the School of Medicine and director of the State Psychopathic Hospital in Galveston, is planning the conference.

Pediatrics.—An annual spring conference on pediatrics will be a part of the child health program of the University of Texas School of Medicine under the direction of Dr. Arild Hansen and will be supported by the Buchanan Foundation of Texarkana, Texas. Enrollment will be limited to forty physicians.

Other conferences in *obstetrics, internal medicine, and clinical physiology* will be arranged later.

Dr. Donald Duncan, former professor of anatomy and chairman of that department at the University of Texas School of Medicine, who resigned his position during the Spies controversy to accept a position in Buffalo, N. Y., later going to Louisiana State University, has been reappointed to his former position effective February 1, states the Galveston *Tribune*.

Dr. Nathan W. Shock, of the section on gerontology of the U. S. Public Health Service, Baltimore, Md., presented two public lectures at the University of Texas School of Medicine during the first week in December. The lectures were on "Experimental Studies of Paths of Displacement of the Acid Base Equilibrium of the Blood" and "Some Physiological Observations on Adolescence." Dr. Shock has developed a method for determining the acid base equilibrium of the blood, using only a few drops of blood for the analysis. This method has been applied in his extensive studies of the metabolic changes occurring during adolescence. More recently he has undertaken an investigation of the changes in the acid base equilibrium and related physiological phenomena in old age, states the Galveston *Tribune*. Dr. Shock was also a guest speaker at the Southwestern Medical College in Dallas during his visit to Texas.

Dr. James Lozya, professor of pediatric surgery at the Military Medical School in Mexico City, made two talks at the University of Texas School of Medicine recently when he was guest of Dr. Edgar Poth, professor of surgery, informs the Galveston *News*. Dr. Lozya, who is assistant director of Hospital Infantil, an 800-bed hospital devoted entirely to pediatrics and said to be the largest pediatric hospital in the world, used as his subjects, abdomen ailments in children and hairlip and cleft palate.

Professor E. V. Cowdry, Ph. D., professor of anatomy, Washington University, St. Louis, and director of research at the Barnard Free Skin and Cancer Hospital, held a special seminar on carcinogenesis at the Tumor Clinic of the University of Texas School of Medicine on December 21. Professor Cowdry was guest speaker at the seminar of the M. D. Anderson Hospital for Cancer Research, Houston, the preceding day.

Commemorating the centennial of the birth of William Conrad Roentgen and of the semi-centennial of his discovery of the rays which bear his name, an exhibit of material relating to radiology was prepared recently for the library of the University of Texas Medical Branch. The exhibit included pioneer publications by Roentgen, the Curies, and others, demonstrating the exploitation of radiant energy in medicine and indicating the relation of Roentgen's discoveries to knowledge of atomic energy.

Funds from the bequest of the late Miss Rosalie B. Hite, of Houston, to the University of Texas will be used to finance fourteen fellowships for the study of cancer cells, according to the Fort Worth *Star-Telegram* and the San Antonio *Express*. The fellowships, to be put in operation at the Main Branch of the University in Austin, will become effective next September 1. Only students of high caliber, similar to that required for Phi Beta Kappa membership, will be considered, Dr. T. S. Painter, acting president of the University, said, and they must be well grounded in biology and either chemistry or physics. Four doctoral fellowships at $200 monthly and ten pre-doctoral fellowships at $100 monthly are planned. Applications will be received until February and awards will be made in April. Miss Hite's bequest consists of real estate and other holdings, the income from which will be used for research.

Texas Branch, Society of American Bacteriologists met at the University of Texas School of Medicine, Galveston, November 24 for its fall session, reports the Galveston *Tribune*. Twenty research papers by leading bacteriologists from the University of Texas, the Texas State Department of Health, Baylor University, Southwestern Medical College, and Fort Sam Houston were presented. A business session, a trip through the Galveston-Houston Breweries, and a party at the Buccaneer Hotel rounded out the program.

Southwestern Medical College.—The campaign to raise $1,300,000 for an operating fund went "over the top," Southwestern Medical College officials reported November 16. The final figure reported by workers, who attested to an enthusiastic response by the public, was $1,309,542, according to the Park Cities *News*.

A postgraduate course designed primarily for returning medical officers was begun January 2 at the Southwestern Medical College, reports the Dallas *Times-Herald*. Dr. William F. Mengert, professor of obstetrics and gynecology and chairman of the postgraduate committee of the College, indicated that the course will cover surgery (five weeks) and obstetrics and gynecology (three weeks). Stress will be placed on disorders not prevalent in the armed forces. The course follows immediately upon conclusion of another postgraduate course in medicine and pediatrics.

Personals

Four members of the faculty of Southwestern Medical College, Dallas, were elected to office in the Southern Medical Association at its session in Cincinnati, Ohio, November 12-16. *Dr. Donald Slaughter*, dean of students, was elected vice-chairman of the Section on Medical Education and Hospital Training. *Dr. Tom E. Smith*, recently returned from the Armed Forces to resume his position as clinical associate professor of proctology, was elected secretary of the Section on Proctology. *Dr. Cecil O. Patterson*, associate professor of medicine and gastroscopy, was elected secretary of the Section on Gastroenterology. *Dr. Curtice Rosser*, professor of proctology, was elected chairman of the central certifying committee in proctology.

Dr. John P. Howser, former physician in the Veterans Administration and former member of the staff of the Wichita Falls State Hospital, has been appointed by the State Board of Control as assistant superintendent of the Big Spring State Hospital, according to the Fort Worth *Star-Telegram*.

Dr. Jesse L. Coleman, recently a flight surgeon in the Army Air Forces, has been appointed to the staff of the Kerrville State Tuberculosis Sanitorium, by the State Board of Control, the Fort Worth *Star-Telegram* reports.

Dr. Clarence G. Allen, Sr., Commerce, was recently injured in an accident on the Greenville-Commerce highway when the automobile which he was driving collided with another carrying three Negroes, one of whom was killed, advises the Greenville *Banner*. Dr. Allen received severe chest injuries and a broken right leg.

Dr. W. M. Campbell, Weatherford, was honored on his eighty-sixth birthday by children of the Central Christian Church in that city, reports the Fort Worth *Press*. Dr. Campbell is reported to have officiated at the births of over 4,000 children during his nearly sixty years of practice in Weatherford and Parker County, including some of those who were present at the recent celebration. After the children's program, members of the "Dr. Campbell Bible Class," which he has taught twenty-two years, spoke briefly. Dr. Campbell's own five children were with him for the celebration.

Mrs. Anna Hannon, mother of *Dr. T. R. Hannon*, president of the Harris County Medical Society, died December 11, 1945, at his home in Houston.—Houston *Chronicle*.

Dr. William E. Marshall, Baytown, was elected president of the newly organized Tri-Cities Chamber of Commerce December 3 at the first meeting of the board of directors, states the Houston *Chronicle*.

Marriages

Dr. Byrd E. White, Jr., Dallas, was married November 27 to Miss May Elizabeth Payne, Athens,

in Athens. Dr. White was graduated from the Baylor University School of Medicine and is on terminal leave from the Army, having served overseas with the Baylor Unit in the North African and Anzio campaigns. Mrs. White was graduated from Baylor School of Nursing and is now on terminal leave as a lieutenant (j.g.) from the Navy, having served nineteen months on Hawaii. The couple will live in Dallas.

Dr. James A. Martin, son of Dr. and Mrs. Charles L. Martin, Irving, was married November 24 at Ashland, Mass., to Miss Enis A. Franchi, a nurse at McLean Hospital in Waverly, Mass. Dr. Martin, a graduate of Rice Institute and Harvard Medical School, is now interning at the Massachusetts General Hospital, Boston.

SOCIETY NEWS

Bell County Society

October 3, 1945

(Reported by O. B. Gober, Secretary)

Peptic Ulcer (motion picture with sound)—Courtesy of Wyeth, Incorporated.

Bell County Medical Society met October 3 at the Kyle Hotel, Temple, with fourteen members and five guests present.

The scientific program noted above was carried out.

In a business session a letter from Dr. R. B. Anderson, Assistant Editor of the TEXAS STATE JOURNAL OF MEDICINE, requesting assistance in securing suitable papers for publication in the JOURNAL was read. Members of the Society having papers which might be used were urged to submit them.

A letter from the University of Texas School of Medicine concerning refresher courses was also read.

Cameron-Willacy Counties Society

December 12, 1945

(Reported by G. Earl Allen, Secretary)

Cameron-Willacy Counties Medical Society met in San Benito December 12, 1945.

Officers elected for the coming year include Thomas J. LaMotte, Harlingen, president; Ervin E. Baden, Raymondville, vice-president; George L. Gallaher, Harlingen, secretary-treasurer; Beatrice Hawkins, Brownsville, board of censors (two year term); C. M. Cash, San Benito, delegate (two-year term).

Two new members were elected: Nelson W. Haas, San Benito, and Hesiquio Rodriguez, Rio Hondo.

El Paso County Society

November 13, 1945

Restoration of the Damaged Hand.

El Paso County Medical Society held its annual dinner meeting November 13 at the William Beaumont General Hospital, El Paso, with President Sam R. King presiding and a large group of physicians from El Paso and outlying military installations present.

"Restoration of the Damaged Hand" was the scientific subject for discussion, under the direction of Lt. Col. William H. Frackelten, assistant chief of plastic surgery at the hospital, as program chairman, assisted by Major Henry I. Berman, assistant chief of surgical service. William Beaumont Hospital is the only center for the treatment of injured hands in the Eighth Service Command.

Col. George W. Reyer extended a welcome to the Society. The response was made by M. P. Spearman, vice-president of the Society.

December 11, 1945

(Reported by John D. Martin, Secretary)

El Paso County Medical Society met December 11 in the Club Room of the Hotel Cortez for a business session.

Officers for the coming year were elected as follows: J. E. Morrison, president-elect; Jesson L. Stowe, vice-president; John D. Peticolas, secretary-treasurer; H. D. Garrett, librarian; F. O. Barrett, Leslie Smith, and Sam R. King, nominating committee; Orville Egbert, Ralph Homan, M. P. Spearman, and Robert F. Thompson, economic committee; Arthur Black, member of Board of Censors; R. B. Homan and Charles Rennick, delegates; J. Leighton Green and S. Perry Rogers, alternate delegates. Russell Holt, who has been serving as president-elect, automatically succeeded to the presidency, following Dr. King.

Members of the Society recently returned from the Armed Forces were introduced. They included F. G. Evans, I. M. Epstein, C. D. Hunter, Basil Goodloe, and J. L. Robbins.

Lester Feener, recently discharged from the Army, was received into membership by transfer from the Cameron-Willacy Counties Society. E. P. Jones was elected to membership on application.

A resolution recommending that the Society officially endorse the work of the Mothers' Health Center, introduced by E. G. Causey and F. P. Miller, was passed.

Falls County Society

December 10, 1945

(Reported by J. W. Torbett, Sr., Secretary)

Rh Factor in Medicine—M. A. Davison, Marlin.

Review of Refresher Postgraduate Course, University of Texas—J. B. Barnett, Marlin.

Falls County Medical Society met at the Buie Clinic, Marlin, December 10.

The scientific program as given above was carried out under the direction of L. C. Carter, program chairman.

In an election of officers the following were chosen: A. C. Bennett, president; E. P. Hutchings, vice-president; L. C. Carter, secretary; M. A. Davison, delegate; J. I. Collier, alternate; N. D. Buie, E. P. Hutchings, and M. A. Davison, legislative committee; H. P. Curry, censor.

Gray-Wheeler Counties Society

November 15, 1945

(Reported by H. L. Wilder, Secretary)

Problems of Blood and Plasma Transfusions—John J. Andujar, Fort Worth.

Managing Fresh Wounds of Violence (motion picture)—Courtesy of Bauer and Black.

Gray-Wheeler Counties Medical Society met November 15 for dinner and a program at the Schneider Hotel in Pampa. Sixteen were present.

The scientific program as given above was carried out. The paper by Dr. Andujar, guest speaker, was discussed by R. M. Brown, W. C. Jones, C. E. High, and P. C. Christian, of Pampa, and H. E. Nicholson, of Wheeler.

R. D. Falkenstein, Pampa, reported a case of a 31 year old man who was passing blood from both kidneys and who reported he had been in the Canal Zone and had had malaria. This case was discussed by Drs. Nicholson, Christian, Brown, Jones, High, Andujar, and O. Huff (Pampa).

Dr. Jones reported another case in which a man 52 years of age presented a tumor on his tongue. Biopsy showed it to be a melano-epithelioma. Physicians in Dallas and St. Louis had refused to treat him. Such a poor prognosis was given the patient that he went to one of the advertising cancer treatment practitioners.

The Society in business session heard a report from the Secretary on the advertising campaign in opposition to the Wagner-Murray-Dingell bills. It was voted to insert the remaining mat in the Pampa *News*.

The committee on a city-county hospital made a report, which was followed by general discussion. Those present were heartily in favor of such a hospital and decided to retain the committee to confer with other committees from the Chamber of Commerce and City Commission.

John B. Segrest, now at McLean, was received as a member in the Society by transfer from Dallas County.

Grayson County Society

November 27, 1945

Grayson County Medical Society met November 27 at Hotel Denison in Denison.

Vernon Tuck, Sherman, who has recently returned from the European theater, was the principal speaker.

S. O. Levin was chairman of arrangements.

Hill County Society

December 14, 1945

(Reported by J. E. Boyd, Secretary)

Hill County Medical Society met December 14 in Hillsboro to elect the following officers for the coming year: James E. Boyd, president; Nellins C. Smith, vice-president; Charles A. Garrett, secretary-treasurer; Ben C. Smith, delegate; Clark C. Campbell, alternate.

Jefferson County Society

November 12, 1945

(Reported by L. R. Byrd, Jr., Secretary)

Symposium by Members of the University of Texas School of Medicine Faculty, Galveston:
Anesthesia in Chest Surgery—H. C. Slocum.
Presentation of Cases and Operative Treatment—A. O. Singleton.
Pathology of Lung Abscesses and Tumors—Paul Brindley.

Jefferson County Medical Society met at Hotel Dieu, Beaumont, November 12, with Stuart Wier, president, presiding.

The scientific program as given above was carried out. The presentation of the Galveston visitors was discussed by D. A. Mann, M. A. Cunningham, Dr. Wier, and John Hart.

Dudley English discussed the relation of the speeding of ambulances to recent ambulance wrecks in Beaumont. After additional discussion by L. R. Byrd, C. H. Todd, J. N. Gardner, Dr. Wier, and T. A. Fears, President Wier appointed a committee of Drs. English, chairman, Fears, and Gardner (Beaumont) and A. R. Autrey and George Sladczyk (Port Arthur) to consider and make recommendations concerning the control of speeding ambulances in the two cities.

H. E. Alexander moved that expense of the annual banquet be prorated among the paying members present at the banquet. The motion carried. President Wier appointed Dr. Hart, chairman, and Dr. Fears to arrange for the banquet to be held in December.

Charles L. Pentecost was elected to membership.

A letter from the Wayne County Medical Society, Detroit, Mich., with reference to a "general practice section" in the American Medical Association was read and discussed.

December 11, 1945

(Reported by L. R. Byrd, Jr., Secretary)

Hill-Burton Bill and Hospital Survey—John Hart, Beaumont.

Jefferson County Medical Society met December 11 at Beaumont Country Club for its annual banquet. President Stuart Wier presided.

Election of officers was held. George Sladczyk, Port Arthur, was elected president; Taylor Walker, Beaumont, vice-president; L. R. Byrd, Jr., Port Arthur, secretary-treasurer (reëlected); J. C. Crager, Beaumont, censor (reëlected); Talbot A. Tumbleson, Beaumont, and L. C. Heare, Port Arthur, delegates (reëlected); L. C. Powell, Beaumont, and R. R. Orrill, Port Arthur, alternate (reëlected).

A motion by E. D. Mills, Beaumont, seconded by B. H. Vaughan, Port Arthur, to give $50 to O. D. Adamson, Jr., secretary to Dr. Byrd, for his services during the year carried.

L. C. Powell, Beaumont, moved that $5 each be given the Port Arthur and Beaumont Tuberculosis Associations. P. B. Greenberg, Beaumont, seconded the motion, which carried.

Dr. Powell moved, seconded by W. A. Smith, Beaumont, that J. B. Morris be retained as attorney for the Society for the year 1946. The motion carried.

Upon motion by E. G. Ward, Beaumont, seconded by W. D. Brown, Beaumont, it was decided to maintain Society dues at $36.

John Hart, Beaumont, gave a short discussion of the Hill-Burton hospital bill and the survey of Texas hospital needs to be begun in the near future.

McLennan County Society

November 13, 1945

Army Medical Service—Brian Aynesworth, Waco.

McLennan County Medical Society met November 13 at Hillcrest Hospital, Waco. Brian Aynesworth, recently discharged from the Army, discussed "Army Medical Service."

Dr. Aynesworth was introduced by Howard Dudgeon, Jr., also a recently discharged veteran.

Smith County Society

November 8, 1945

Diagnosis—Raymond Gregory, Professor of Medicine, University of Texas School of Medicine, Galveston.
Pediatric Problems—Arild Hansen, Professor of Pediatrics, University of Texas School of Medicine, Galveston.

Smith County Medical Society held a dinner meeting November 8 at the Blackstone Hotel, Tyler, with Raymond Gregory and Arild Hansen, both members of the University of Texas School of Medicine staff, as honored guests and speakers.

Dr. Gregory spoke of obscure fevers, noting diagnostic points to be looked for in the history and physical examination of persons who show few local symptoms. Two case histories were presented by local physicians for diagnosis and discussion.

Dr. Hansen reviewed the history of pediatrics and pleaded for more adequate hospital facilities for pediatric care. Several case histories were presented by local physicians and discussed.

Visitors at the dinner included Col. Floyd W. Hunter and Major G. W. Strom, of Camp Fannin. E. W. Clawater was in charge of arrangements.

December 14, 1945

(Reported by William M. Bailey, Secretary)

Smith County Medical Society met in the library of Mother Frances Hospital, Tyler, December 13, 1945, to elect officers for 1946. The roster of officers, all of Tyler, includes L. T. Niell, president; M. H. Moore, vice-president; William M. Bailey, secretary-treasurer (reëlected); T. M. Jarmon, delegate (reëlected); E. W. Clawater, alternate (reëlected); and Orion Thompson, board of censors (reëlected for three-year term).

Tom Green-Eight County Society

December 3, 1945

Treatment of Acute Coronary Thrombosis—Paul J. Schwab, University of Texas School of Medicine, Galveston.
Newer Aspects in the Treatment of Chronic Coronary Disease—George R. Herrmann, University of Texas School of Medicine, Galveston.

Tom Green-Eight County Medical Society met December 3 at Hotel Cactus, San Angelo, for dinner and a business meeting.

The above scientific program was carried out. Dr. Schwab stressed the treatment of the patient during the critical period of the first ten days of acute coronary thrombosis. He emphasized four important aspects of such treatment: prompt and effective relief from pain, effective rest for the patient, control of shock, and preventive measures

to offset complications. Dr. Herrmann cited one cause of chronic coronary disease as too much fat and the person's lack of ability to cope with it. The employment of a low fat diet with the use of amino acids or proteins, vitamin B complex, and red meats are advantageous in preventing coronary disease, he said.

Election of officers for the coming year was held. Grady Mitchell was elected president; F. T. McIntire, vice-president; and R. M. Finks, secretary. All are of San Angelo.

W. B. Roberts was elected to membership, and Cecil M. French, formerly of Dallas, and Murray Wood, formerly of Midland, were accepted for membership by transfer.

Wharton, Jackson, Matagorda, and Fort Bend Counties Society

November 13, 1945

Wharton, Jackson, Matagorda, and Fort Bend Counties Medical Society met jointly with the Auxiliary November 13 as guests of Dr. and Mrs. R. G. Johnson and Dr. and Mrs. J. W. Simons for a barbecue at the Newgulf barbecue pit. Ten Society members and nine Auxiliary members were present.

Following the meal, each organization met separately for a program and business session.

F. O. McGehee, Houston orthopedic surgeon, was guest speaker for the Society.

AUXILIARY NOTES

Officers of the Woman's Auxiliary to the State Medical Association of Texas: President, Mrs. C. B. Alexander, San Antonio; President-Elect, Mrs. George Turner, El Paso; First Vice-President, Mrs. S. M. Hill, Dallas; Second Vice-President, Mrs. L. W. O. Janssen, Corpus Christi; Third Vice-President, Mrs. Troy A. Shafer, Harlingen; Fourth Vice-President, Mrs. Mark H. Latimer, Houston; Treasurer, Mrs. F. R. Rugeley, Wharton; Recording Secretary, Mrs. Paul H. Power, Waco; Corresponding Secretary, Mrs. Wilbur Robertson, San Antonio; Publicity Secretary, Mrs. E. L. Howard, Fort Worth; Parliamentarian, Mrs. W. R. Klingensmith, Amarillo.

AUXILIARY NEWS

Bell County Auxiliary gave a tea November 9 honoring Mrs. Charles B. Alexander, San Antonio, State president; Mrs. M. A. Davison, Marlin, Twelfth District president; Mrs. John R. Winston, Temple, Bell County president; and wives of McCloskey Hospital physicians, at the home of Mrs. G. V. Brindley, Temple.

In the receiving line were Mesdames Brindley, Alexander, Winston, Davison, J. A. Bethea, L. R. Talley, and R. C. Curtis. Other members of the house party included Mesdames A. E. Moon, T. F. Bunkley, V. M. Longmire, M. W. Sherwood, W. A. Chernosky, and J. E. Robinson.

Assisting in the dining room were members of the social committee, composed of Mesdames W. B. McCall, H. B. Anderson, R. K. Harlan, W. M. Powell, Ford Wolf, L. D. Stuart, Valter Brindley, and Hanes Brindley. Mrs. A. C. Scott, Sr., and Mrs. L. W. Pollok were at the tea service.

Roses decorated the music room and yellow and bronze chrysanthemums the living and dining rooms.

Bowie and Miller Counties Auxiliary held its October 26 meeting at the home of Mrs. Roy Baskett, with Mrs. W. H. Daubs, Mrs. N. B. Daniels, and Mrs. Allen Collom as cohostesses. Mrs. William Hibbitts presided.

Mrs. John Spencer was the guest speaker, illustrating a talk on Alaska with maps. She presented souvenirs of Alaska as prizes for correct answers to questions on the subject. These were won by Mrs. P. H. Phillips, Mrs. E. M. Watts, and Mrs. Harry Murry.

Mrs. J. T. Robinson discussed legislative problems, and Mrs. Murry reported on the recent district meeting in Camden which she attended.

The Auxiliary decided to change the date of its Christmas party to December 14.

During the social hour refreshments were served in the dining room with Mrs. Hibbitts pouring coffee.

Bowie and Miller Counties Auxiliary met November 23 at the home of Dr. and Mrs. Chester E. Kitchens at Little River Country Club, Texarkana. Hostesses were Mesdames Kitchens, Ralph Cross, P. H. Phillips, and C. A. Smith. Nine guests and fifteen members were present for the business meeting and luncheon.

During the business session, conducted by Mrs. William Hibbitts, president, the Auxiliary voted to assist the medical societies in conducting a tumor clinic to be held in Texarkana in February.

Mrs. Roy Baskett, Hygeia chairman, reported that twenty subscriptions to *Hygeia* had been donated to Texarkana schools and one subscription to the public library.

It was agreed that the Auxiliary join the Council of Community Service with Mrs. Hibbitts as representative.

Galveston County Auxiliary met November 23 at the Rebecca Sealy Nurses Residence in Galveston, with Mrs. Charles B. Alexander, San Antonio, State president, as the speaker.

Following the business session tea was served to members of the Auxiliary and their special guests, the Medical Dames and members of Alpha Epsilon Iota, women's medical fraternity. Musical selections were furnished by Mrs. William B. Potter, Mrs. George Decherd, Mrs. W. D. Collins, and Mrs. John McGivney.

Mrs. Arild Hansen and Mrs. G. W. N. Eggers were in charge of arrangements. Hostesses were Mesdames H. O. Knight, W. T. Dawson, Edward Randall, Jr., D. Bailey Calvin, Jesse B. Johnson, and Stephen Weisz.

Henderson County Auxiliary met November 13 with Mrs. A. H. Easterling in Athens. Mrs. C. H. Nash and Mrs. R. E. Henderson were cohostesses. Eleven were present.

Following roll call, which was responded to by items of current medical interest, Mrs. W. T. Black read an article on "Medicine's Newest Wonder Drug —Streptomycin," and Mrs. R. H. Hodge read an editorial comment from the TEXAS STATE JOURNAL OF MEDICINE on the treatment of hay fever and sinus disorders.

Mrs. C. H. Nash, Jr., was received as a new member.

Refreshments were served during the social hour.

Johnson County Auxiliary was entertained November 14 in the home of Mrs. Gladys Whitehouse, Cleburne, with Mrs. J. G. Little as cohostess. Twelve were present.

The program consisted of an article on insecticides presented by Mrs. C. C. Jowell.

At the close of the business session, presided over by Mrs. T. F. Yater, a salad and dessert plate was served.

Liberty-Chambers Counties Auxiliary met for a business session November 12 in the home of Mrs. A. L. Delaney, Liberty.

November 26 was selected as the date for a luncheon at the Houston Club, Houston, honoring Mrs. Charles B. Alexander, San Antonio, State president.

The annual Doctors Dinner was set for the regular meeting night in March.

Plans to secure a speaker on socialization of medicine were discussed.

Mrs. Frank Griffin, who had been absent for three and a half years while her husband served with the Army in Europe, was welcomed home.—Mrs. Jack Bevil, Secretary.

Tarrant County Auxiliary gave a coffee November 9 in the Alamo Room of Hotel Texas with representatives of all Fort Worth women's clubs, superintendents of hospitals, and public health officials as guests. A total of 150 members and guests attended.

Dr. T. H. Thomason, president of the Tarrant County Medical Society, spoke on current medical legislation. He was introduced by Dr. R. B. Anderson, assistant secretary of the State Medical Association.

The program was in charge of Mrs. R. B. Anderson, chairman of the legislative committee, and Mrs. A. L. Roberts, president, presided.

Mrs. Roberts, Mrs. A. B. Pumphrey, and Mrs. Anderson were in the receiving line. Mrs. E. L. Howard and Mrs. M. H. Crabb poured at a table decorated with bittersweet in antique brass containers.

Taylor-Jones Counties Auxiliary has reported the death of two of its members:

Mrs. Ann Burns (J. M.) Alexander, Abilene, who died August 17, 1945, in Abilene.

Mrs. Mae Cagle (William R.) Snow, Abilene, who died of heart disease November 10, 1945, near Fort Worth. Mrs. Snow was chairman of the Public Relations Committee for the State Auxiliary—Mrs. James P. Bridges, Corresponding Secretary.

Washington County Auxiliary met September 17 for luncheon and a business meeting at the St. Anthony Hotel, Brenham. Mrs. C. E. Southern, Burton, president, presided.

It was voted to send $10 to the Student Loan Fund and to continue the project of the past year, sending a book each month to the McCloskey Hospital Library.

Washington County Auxiliary honored the Medical Society with a barbecue October 29 at the ranch of Dr. Waldo Knolle on the Bellville highway. The long tables were decorated with crepe paper and large bowls of flowers in Halloween colors. All but three members were present.

Dr. W. F. Hasskarl invited the group to attend a barbecue at his ranch next year.

Northwest District Auxiliary met in Fort Worth at the Blackstone Hotel on November 15, with twenty-two members and guests present for luncheon.

Mrs. E. Roy Townsend, Eastland, president of the District Auxiliary, presented greetings to the group and spoke on "Health in Peacetime."

Mrs. Charles B. Alexander, San Antonio, president of the State Auxiliary, discussed the aims and responsibilities of the Auxiliary.

Mrs. Jack Muirhead, Eastland, reviewed the book Enrico Caruso.

The invocation was delivered by Mrs. W. G. Phillips, Fort Worth.

At a short business meeting Mrs. A. W. Brazda, Ranger, was elected president and councilwoman, and Mrs. P. M. Kuykendall, Ranger, was elected secretary-treasurer.

BOOK NOTES

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1944. Cloth, 238 pages. Price, postpaid, $1.00. Chicago: American Medical Association, 1945.

The Council on Pharmacy and Chemistry recently issued the thirty-sixth edition of the Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association. This volume contains in compact form not only the reports of the Council which have been published in *The Journal of the American Medical Association* during the past year, but also some additional reports which were not considered of sufficient importance to be published in the *Journal*.

The present volume is quite unusual in that it contains not one report concerning a product found unacceptable. However, there are five reports on the omission of products from New and Nonofficial Remedies, mainly for the reason that they have outlived their usefulness, and in most cases the manufacturers have expressed their lack of desire for continued inclusion of their brands. These reports are: Erysipelas Streptococcus Antitoxin and Antierysipelas Serum Omitted from New and Nonofficial Remedies; Ichthammol Preparations, Isarol, Ichthynat, Ichthyol, Omitted from New and Nonofficial Remedies and Soluble Ichthammol, Not Within the scope of New and Nonofficial Remedies; Iodine Compounds: Iodalbin and Stearodine; Iodo-Casein; Iothion; and Iodostarine; Omitted from New and Nonofficial Remedies; Mercuric Oxycyanide, Mercuric Salicylate and Mercuric Succinimide Omitted from New and Nonofficial Remedies; and Status of Antimeningococcic Serum and Meningococcus Antitoxin.

This volume is a veritable mine of information on subjects of general interest to the physician, pharmacist, and the pharmaceutical manufacture. The reports concern deliberations of the Council on general subjects ranging from the use of the electron microscope to the appraisal of new drugs. The report on pathogenic bacteria, rickettsias, and viruses as shown by the electron microscope is noteworthy as being pioneer work in this field. The report on the current status of prophylaxis by hemophilus pertussis vaccine was prefatory to the acceptance by the Council of various brands of pertussis vaccine and pertussis vaccine combinations. The valuable and highly informative article on local treatment of thermal cutaneous burns reports on the latest and best work in this field.

New and Nonofficial Remedies, 1945, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1945. Cloth, 760 pages. Price, postpaid, $1.50. Chicago: American Medical Association, 1945.

Each year a revised list of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association as of January 1 is published in book form under the title of "New and Nonofficial Remedies." The book contains the descriptions of acceptable proprietary substances and their preparations, proprietary mixtures if they have originality or other important qualities, important nonproprietary nonofficial articles, simple pharmaceutical preparations, and other articles which require retention in the book.

Some fifteen or twenty newly accepted preparations appear in the 1945 volume. A large number of preparations have been omitted, mainly brands of official preparations. The general statement concerning these pharmacopeial preparations has been retained for the information of physicians.

As stated in the preface, the entire book has been scanned to bring it up to date with the latest medical knowledge. It is noted that the section "Articles and Brands Accepted by the Council But Not Described in N. N. R.," a vestigial remnant of which appeared in the 1944 volume, has now entirely disappeared.

This section appeared to have been a catch-all for brands of official articles the acceptance of which the manufacturers desired for reasons of prestige, and miscellaneous preparations which were not necessarily or importantly within the Council's scope and which did not require detailed description. Many of the official preparations have been transferred to the body of the book and the others deleted. One

is struck by the large amount of medical information contained in this volume. Certainly no other compendium of comparable price contains so much.

[1]**Penicillin and Other Antibiotic Agents.** By Wallace E. Herrell, M. D., M. S., F. A. C. P. Assistant Professor of Medicine, the Mayo Foundation, University of Minnesota; Consultant in Medicine, Mayo Clinic, Rochester, Minnesota. Cloth, 348 pages, with 45 illustrations and 4 color plates. Price, $5.00. Philadelphia and London, W. B. Saunders Company, 1945.

Dr. Herrell's book is extremely well written and well organized. It represents a thorough compilation and review of the present knowledge of penicillin and other antibiotics with the main emphasis being on the clinical use of these products.

The first part of the book deals with the history of the discovery of penicillin. The discussions on the physical and chemical properties, the antibacterial activity, the absorption, distribution, and excretion of penicillin by the body are very clear and concise and certainly give a working knowledge of the properties and pharmacology of penicillin. The discussions on actual production and methods of standardization of the drug and testing of the antibiotic activity should suffice as a working reference for any investigator following this line of work.

The second part of the book deals with the clinical use of penicillin. The types of the drug in use at present and the methods of administration and dosage are discussed in detail. The author then discusses the clinical use of penicillin in infections involving the blood stream and heart, the central nervous system, including the eye, the respiratory system, the skeletal system, infections of the soft tissues, infections of the genito-urinary system, gonorrhea and syphilis, and other miscellaneous infections. In this part of the discussions the author not only gives the evaluations of his own use of the drug in the various infections but reviews the work of other investigators in the field. He discusses dosage and plans of treatment and expected results with the various types of infections.

The third part is devoted to the other antibiotic agents. Dr. Herrell briefly reviews the development of the clinical use of the other antibiotics from "pyocyanase" in 1899 on up to the present. He discusses in detail only those antibiotic agents which appear to possess possible clinical application; namely, Dubos's tyrothricin (gramicidin and tyrocidin) and Waksman's streptothricin and streptomycin. It seems apparent that tyrothricin and its two fractions are fairly active antibacterial agents and that serious toxic effects are not likely to occur following local use of antibacterial amounts of these agents. Because of their hemolytic properties and because of their known toxicity for experimental animals, however, none of these agents can be administered intravenously, intramuscularly, or subcutaneously in the treatment of bacterial infections. This limitation to local use only applies also to streptothrycin. The streptomycin, however, can be used intramuscularly, but enough clinical data have not been accumulated to justify final statements concerning its use in man in infections due to organisms susceptible to this antibiotic.

[2]**Men Under Stress.** By Roy R. Grinker, Lt. Col., M. C., and John P. Spiegel, Major, M. C., Army Air Forces. Cloth, 484 pages. Price $5.00. Philadelphia, The Blakiston Company, 1945.

Having served in both the active theater of combat and in the Army Air Force Convalescent Hospital, the authors are well prepared to contribute to our formerly inadequate understanding of the psychological injuries of war. Although the book is restricted to consideration of the nervous reactions of flying personnel of the army, the primary purpose of the book is served quite effectively.

Forsaking vague terms of World War 1 vintage, such as "shell shock," the authors have endeavored to create an orderly, workable, scientific classification and explanation of the emotional variants which have occurred in this war. The book is broadly divided into two general discussions—reactions of the flyers in combat and reactions of the returned veterans. These sections each embody classifications, case studies, psychodynamics, and methods of treatment with no effort spared for completeness.

The sections on psychodynamics and narcosynthesis are particularly outstanding. Many well chosen cases substantially simplify the reading and stimulate the reader's interest. The simple accurate manner of writing will insure the appreciation of the busy physician who is interested in constructive reading material.

The book in its entirety is worthy of the most favorable comment, for it utilizes fact, theory, and investigative skill in opening a new avenue of understanding to the abnormal psychological reactions of modern warfare.

[3]**Bacillary Dysentery, Colitis and Enteritis.** By Joseph Felsen, B. A., M. D. Director of Medical Research, Bronx Hospital, New York; Director of International and Pan-American Dysentery Registry. Illustrated. Cloth, 618 pages. Price, $6.00. Philadelphia and London, W. B. Saunders Company, 1945.

Anyone interested in diseases of the colon should read this book. It is full of information from a historical, etiological, pathological, and treatment standpoint.

The author first takes up in detail and in a most interesting way the clinical aspects of acute bacillary dysentery, as well as the serological aspects.

In the portion on treatment, he has reported on the various kinds of treatment, and the results in each case or group of cases is reported. He also has given credit to other recognized authorities.

The second portion of the book is devoted to chronic ulcerative colitis and chronic distal ileitis. The section under diagnosis contains numerous roentgenograms illustrating many different features, making diagnosis easier and much more certain.

Again, in the treatment, he has given all of the known ways of combating such conditions.

The entire book shows the untiring endeavor of the author to write a complete coverage of the subject.

VENEREAL DISEASE ABSTRACTS*

Treatment of Granuloma Inguinale with Diramin: A New Antimonial. Robert B. Greenblatt, Austin V. Deibert, Samuel Fisher, and William J. Clough. Journal Venereal Disease Information, Washington, 26:238-239 (Nov.) 1945.

Treatment of 29 patients indicated that diramin, a new antimonial, when administered intravenously was a good, safe preparation for the treatment of granuloma inguinale, although possibly not so effective as fuadin.

Fourteen patients were treated with diramin administered intravenously in 2 cc. quantities two to five times weekly; patients to whom a few intramuscular injections were administered complained of

[1]Reviewed by S. W. Bohls, M. D., Director of Laboratories, State Department of Health, Austin, Texas.

[2]Reviewed by C. Moody Bettis, M. D., Galveston, Texas.

[3]Reviewed by E. V. DePew, M. D., San Antonio, Texas.

*Abstracts of articles appearing in *The Journal of Venereal Disease Information* (formerly *Venereal Disease Information*). November, 1945, prepared by the Venereal Disease Division, U. S. Public Health Service.

much pain. In each of the 14 patients, changes ranging from slight improvement to complete healing were observed.

Results of administering to 15 other patients a course of fuadin either before or after a course of diramin therapy indicated that the diramin, administered in 2 cc. amounts, was not as effective as the fuadin, administered in 5 cc. amounts. Penicillin administered to several patients for total dosages of 1 to 2 million units over ten to twenty day periods was without benefit.

Comparison of Gonococcus Cultures Read at 24 and 48 Hours. Jean Johnston. Journal Venereal Disease Information, Washington, 26:239-241 (Nov.) 1945.

In a study of 200 duplicate positive gonococcus cultures read after 24 hours' and after 48 hours' incubation time, the author found that the 24-hour readings were as good as, and probably superior, to 48-hour readings.

The 24-hour cultures were superior to the 48-hour cultures with respect to the amount of contaminating growth which was much greater on the 48-hour plates, both in the number and size of the colonies. Plates where the gonococcus colonies grow only on the thinnest portions, with no evidence of the gonococcus on the heavily streaked portion, are seen fairly commonly among routine 48-hour cultures. Thus, when the number of contaminating organisms increases and the number of gonococci diminishes, the chance of carrying over any gonococci to the thin portion of the plate is reduced and a certain small percentage of positive cultures is lost. The chance of recovering a few gonococci on culture is greater at 24 hours. In chronic cases where the number of gonococci present in the exudate is small, or where material for culture is not obtained in the prescribed manner, culture may fail to demonstrate their presence.

A second distinct advantage of the 24-hour cultures over the 48-hour cultures is the appearance of the organisms in the smears from 24-hour plates. At 24 hours the gonococci show their typical morphology, they stain deeply, are uniform in size, and show practically no variation in shape. The organisms from 48-hour cultures usually vary considerably from their typical morphology; even to a person familiar with culturing gonococci these atypical forms are sometimes confusing.

A third advantage is that a diagnosis can be made 24 hours sooner and the patient started on treatment. It shortens the period of detention when the patient is under quarantine. In overcrowded institutions it cuts off at least one day's hospitalization for each patient being examined or treated for gonorrhea.

The Treatment of Gonorrhea with Penicillin during the Incubation Period or Early Phase of Syphilis. A Review. Allen E. Walker and Robert L. Barton. Journal Venereal Disease Information, Washington, 26:241-244 (Nov.) 1945.

The authors review 7 of the many cases which have been reported and present 1 additional case, in which penicillin therapy for gonorrhea prevented detection of syphilis during and immediately following treatment.

The study illustrates a danger to both the individual and the public health since the relatively small doses of penicillin which cure gonorrhea may, in the case of concomitant early syphilis, suppress primary and secondary manifestations but will not prevent recurrences.

As indicated by the 8 cases studied, all patients receiving penicillin therapy for gonorrhea should be observed periodically for at least twelve weeks after treatment in order to determine whether or not syphilis is present. The physical examination for gonorrhea should be thorough, for should an unsuspected or concealed chancre or genital lesion be uncovered after penicillin therapy is started, the darkfield examination would in all probability be negative. Even when physical examinations are negative, it may still be possible if the patients are kept under close observation during treatment, to discover a number of such cases. Any patient showing an unusual reaction to penicillin, or having a Herxheimer-like reaction, should be examined at frequent intervals for the possible presence of syphilis.

The authors suggest that when there is evidence or suspicion of coexisting syphilis, penicillin therapy should be withheld until a definite diagnosis of syphilis is established or excluded. When this is done, treatment may be started earlier, and the ultimate chances for recovery from syphilis are increased.

DEATHS*

Dr. James Linton Rentfro, Brownsville, Texas, died November 11, 1945, at his home of coronary sclerosis.

Dr. Rentfro was the son of R. B. and Laura (Linton) Rentfro. He was born April 30, 1885, at Brownsville, where attended public school. He went to St. Edwards Academy at Austin, and then secured his medical education at Louisville Medical College in Kentucky, being graduated there in 1908 and winning the scholarship medal in competitive examination that year. He interned at Louisville City Hospital and practiced a short time in Sapulpa, Okla., before returning to Brownsville to practice.

DR. JAMES LINTON RENTFRO

Dr. Rentfro had been for many years a member of the State Medical Association and American Medical Association through the Cameron-Willacy Counties Medical Society. He was health officer for Cameron County, and was the first chief of staff at Mercy Hospital in Brownsville. He was a thirty-second degree Mason and a Knight Templar.

Dr. Rentfro was married June 4, 1924, to Miss Alice Ballard, of Beeville. He is survived by his wife, a son, James B. Rentfro, who is a student at Cornell University Medical School in New York City; two brothers, R. B. Rentfro, Sr., Brownsville, and Guy L. Rentfro, San Antonio; and one sister, Mrs. John Ayedelotte, San Antonio.

*An obituary ordinarily will not be published more than four months after date of death. Coöperation in reporting deaths of physicians and in furnishing appropriate biographical material promptly is solicited.

Friends of Dr. Rentfro are now subscribing to a memorial fund to be applied to purchasing equipment for Mercy Hospital in Brownsville. Another tribute was paid to Dr. Rentfro in February, 1944, at which time the Medical Association of Matamoros, Mexico, gave a banquet honoring Dr. Rentfro. He was presented with a diploma stating that he exemplified everything required by the Oath of Hippocrates. It is believed that no other physician had previously received similar acclaim by citizens of Mexico.

Dr. Joseph Jerome Livingston, of Tyler, Texas, died in New Orleans, La., November 20, 1945, of heart disease.

Dr. Livingston was born March 12, 1875, near Canton, Mo. He was reared an orphan, attending schools near Canton. He received his medical education at Tulane University, New Orleans, being graduated in 1910. Dr. Livingston began the practice of medicine in Hot Springs, Ark., moving to Tyler in 1916. He served twenty-three months overseas during World War 1 as a first lieutenant in the Medical Reserve Corps of the Army, receiving a citation for exceptional devotion to duty. He took postgraduate work at Trinity College in Dublin, Ireland, before returning to the Veterans Hospital in Hot Springs for a short time and then to Tyler to continue practice, emphasizing urology and operating a small private hospital. About ten years ago he developed a cardiac condition which caused his retirement from active practice, and he moved at that time to his farm.

DR. JOSEPH JEROME LIVINGSTON

Dr. Livingston was a member for a number of years of the State Medical Association and the American Medical Association, through the Smith County Medical Society. He was a member of the Presbyterian Church and of Odd Fellows.

Dr. Livingston was first married in 1905 to Miss Mary Ella Bobkin, of St. Louis, Mo. He was married again in 1933 in Hot Springs to Miss Nell Kelly, who survives.

Dr. H. Arthur Swan, Abilene, Texas, died at a local hospital November 14, 1945, of pulmonary emphysema.

Dr. Swan was born January 10, 1890, in Abilene, the son of Henry A. and Aline (Dalmont) Swan. His father, a native of Glasgow, Scotland, was one of the earliest settlers of Abilene, arriving there before the railroad was built. Dr. Swan attended the Abilene public schools, St. Matthews Military Academy in Dallas, and the University of Texas in Austin, receiving a law degree from the latter institution. His medical education was obtained at Baylor University, Dallas, where he was graduated in 1914. He served an internship at Cook County Hospital, Chicago, and then began the practice of medicine at Ovalo, Texas. He moved to Ranger and operated a hospital there during the oil boom. In 1920 he returned to Abilene, where he practiced until his death.

Dr. Swan had been during most of his professional career a member of the State Medical Association and the American Medical Association through the Taylor-Jones Counties Medical Society. During the first World War he served as a captain in the Army. He was a member of the Presbyterian Church and American Legion, and was a thirty-second degree Mason.

DR. H. ARTHUR SWAN

Dr. Swan married Miss Virginia Voorhees, of Abilene, December 26, 1929. He is survived by his wife; a son, H. Arthur Swan, Jr.; and a baby daughter, Eleanor Aline Swan, all of Abilene; and one sister, Mrs. E. S. Lowrance, Dallas.

Dr. John Francis McDonald, Hillsboro, Texas, died at his home November 18, 1945, of coronary occlusion.

Dr. McDonald was born March 8, 1881, in Celeste, Texas, the son of Joseph Augustas and Mary Narcissus (Byars) McDonald. He was graduated from Baylor University in Waco in 1905 and received his medical degree from the University of Texas School of Medicine in 1912. He began practice in Goldthwaite upon graduation, but moved to Meridian in 1914. He saw active service during World War 1 and then returned to private practice in Hillsboro in 1918, where he remained until his death.

DR. JOHN FRANCIS McDONALD

Dr. McDonald had been continuously since 1916, with the exception of the war year 1918, a member of the State Medical Association and the American

Medical Association, first through the Bosque County Medical Society and then through the Hill County Medical Society. He served the Hill County Society as president in 1937. He was for many years in the Medical Reserve Corps of the U. S. Army in which he accepted a commission in 1902. During 1917 and 1918 he was on active duty at two field hospitals, returning to reserve status after the war. He helped reorganize the Texas National Guard, and retired with the rank of major in December, 1940, after more than twenty-five years of service. Dr. McDonald was also active in the Masonic order, at the time of his death being Deputy Grand High Priest of the Grand Chapter of Texas, Royal Arch Masons, a member of the Scottish Rite and of the Shrine. He was a member of the Episcopal Church, American Legion, the Knights of Pythias, and the Knights Templar.

Dr. McDonald was married in 1915 to Miss Helen Tomlinson, of Bellville, who survives. He is also survived by two sons, Lt. Col. Francis G. McDonald, U. S. Army, and Hendley A. McDonald, Baylor University School of Medicine; a brother, Charles A. McDonald, Stephenville; and two sisters, Mrs. Alice Roach, Celeste, and Mrs. Bert McCraw, Greenville.

Dr. Walter Kleberg died of heart disease November 9, 1945, at his home in Galveston, Texas.

Dr. Kleberg, son of the late Marcellus E. Kleberg, one-time Galveston city attorney, was born in Galveston, October 12, 1881. He attended the public schools of Galveston and the University of Texas in Austin, receiving his degree from the Medical Department of the University in Galveston in 1905. He served an internship at St. Mary's Infirmary, Galveston, and then practiced for a short time at Giddings, returning to Galveston to spend the remainder of his life. Prior to graduation from the School of Medicine, Dr. Kleberg had served in 1902 as assistant chief fumigator of the United States quarantine station and in 1904 as quarantine inspector against yellow fever. He was city health officer for Galveston from 1913 to 1917 and again from 1925 until his death. From 1910 to 1925 he was lecturer on hygiene in the nursing school at St. Mary's Infirmary.

DR. WALTER KLEBERG

Dr. Kleberg had been for many years a member of the State Medical Association and American Medical Association through the Galveston County Medical Society. He was a member of Sigma Chi medical fraternity and a past president of the Texas City Health Officers Association.

Dr. Kleberg is survived by his wife, the former Mrs. Nell Fulton Nichols, whom he married March 26, 1938; two sisters, Mrs. H. C. Hughes, Galveston, and Mrs. E. W. Bass, Fort Worth; and a brother, Marcellus Kleberg, Fort Worth.

Dr. Walter J. Mathews, Abilene, Texas, died October 5, 1945, at a local hospital following several weeks of illness.

Dr. Mathews, son of Oliver and Lucy Mathews, was born in Mount Vernon, Texas, July 4, 1873. He was graduated from a college at Sulphur Springs, and received his medical education at the University of Maryland, from which he was graduated in 1893, and from Tulane University and the University of Chicago. He served a one year internship at the Baltimore, Md., City Hospital. Dr. Mathews practiced in Mount Pleasant and Naples, Texas, from 1900 to 1912 during which time he was surgeon for the Cotton Belt Railroad. He then moved to Abilene, where he was associated with the Abilene State Hospital until World War 1, when he served first as chief of the eye, ear, nose, and throat department at Camp Bowie, then as chief surgeon in the same department at Camp Custer, after which he went to France with the 123rd base hospital. After the armistice, Dr. Mathews did special work in the Royal Ophthalmic Hospital in London and in the Central London Hospital. He then returned to Abilene, where he was in the active practice of his specialty until his death.

DR. WALTER J. MATHEWS

Dr. Mathews had been for many years a member of the State Medical Association and American Medical Association, first through the Titus and Morris Counties Medical Societies and more recently through the Taylor-Jones Counties Medical Society, of which he was a past president. He served the State Medical Association as Secretary of the Section on Medicine and Diseases of Children in 1908 and as Chairman of the Section on Gynecology and Obstetrics in 1912. He had been president of the staff of Hendrick Memorial Hospital in Abilene, and was aviation medical examiner for the Department of Commerce in the Abilene area, and eye, ear, nose, and throat specialist for the Texas and Pacific Railroad. He was at the time of his death a member of the board of St. Paul's Methodist Church, a member of the Lions Club and American Legion, and was active in leadership of the Boy Scouts.

Dr. Mathews is survived by his wife, Mrs. Tennessee Mathews, whom he married in 1900; and three daughters, Mrs. Howard Moore, Naples; Mrs. B. L. LeFevre, Big Spring; and Mrs. Leon Churchill, Dayton Ohio.

Texas State Journal of Medicine

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Vol. XLI **February, 1946** **No. 10**

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

Local Committees, 1946 Annual Session.—As per custom there is published herewith, both for the record and for the convenience of members of the Association, a list of the local committees which are serving and will serve in connection with the 1946 Annual Session to be held in Galveston, May 6-9, with the Galveston County Medical Society as host.

Announcement has previously been made that the Galvez Hotel has been selected as headquarters for the State Medical Association, and the Buccaneer Hotel, just two blocks away, on the famed Seawall Boulevard overlooking the Gulf of Mexico and bordering on one of the finest, if not the finest, bathing beaches in the world, will be headquarters for the Woman's Auxiliary.

Members planning to attend should immediately make hotel reservations with the hotel of their choice. Galveston has fine hotels and tourist courts. If difficulty is experienced in securing accommodations, the Hotels Committee, listed here, will be glad to help if given the opportunity. A record breaking attendance is anticipated. This is the first Annual Session since our country went "all out" for war in 1942, with "all the trimmings," including General Meetings, Clinical Luncheons, Scientific Sections, Scientific and Technical Exhibits, House of Delegates, the traditional President's reception, and all the features that make the Annual Session unique of its kind in Texas. Make that reservation now!

The titles of the local committees suggest their functions. If any member has any question of local nature which does not seem to fit any committee designated, it may very properly be addressed to the chairman of the General Arrangements Committee, who will either answer it himself or refer it to the committee which should receive it.

Let us not hesitate to use these committees which our host society has set up for our convenience. They are willing and eager to be of service.

LOCAL COMMITTEES

General Arrangements.—Dick P. Wall, Chairman; John McGivney, W. C. Fisher, Jr., Edward R. Thompson, and Raymond Gregory.

Reception.—William L. Marr, Chairman; William T. Anderson, F. W. Aves, George Beeler, Paul Brindley, M. A. Caravageli, Duncan Danforth, G. W. N. Eggers, W. C. Fisher, Jr., Francis Garbade, Arild Hansen, Titus H. Harris, W. J. Jinkins, G. Mason Kahn, Joseph Magliolo, Charles F. Mares, R. M. Moore, S. M. Morris, George McReynolds, Edward Randall, Jr., Boyd Reading, M. L. Ross, Henry A. Schmidt, A. O. Singleton, S. R. Snodgrass, William Spiller, and W. S. Starley.

Clinical Luncheons.—John L. Otto, Chairman; W. R. Cooke, Raymond L. Gregory, Arild Hansen, Charles A. Hooks, R. M. Moore, George McReynolds, William B. Potter, H. Reid Robinson, and Harvey Slocum.

Transportation.—Hughes Gilliam, Chairman; M. A. Caravageli, A. J. Jinkins, W. G. Kolb, A. Magliolo, and Bernard Perlman.

Golf.—Edward Randall, Jr., Chairman; R. E. Cone, W. R. Cooke, B. R. Parrish, W. W. Stephens, C. T. Stone, and Clarence Sykes.

Finance.—Titus H. Harris, Chairman; Paul Brindley, George M. Decherd, Ben P. Fleming, Jesse B. Johnson, Emil H. Klatt, George T. Lee, Joseph Magliolo, and William Spiller.

Memorial.—E. B. Ritchie, Chairman; Theodore McC. Frank, William B. Potter, Clarence Quinn, and William F. Starley.

Information.—M. L. Ross, Chairman; Carroll Adriance, Wade L. Hoecker, Norman D. Jarrell, William C. Levin, G. R. Manske, W. F. McKinley, and Herman Weinert.

Scientific Exhibits.—Edgar J. Poth, Chairman; John Delany, Chester N. Frazier, George Herrmann, Robert Roland, Arthur Ruskin, Harvey Slocum, H. H. Sweets, Jr., and Weldon White.

Technical Exhibits.—Edward J. Lefeber, Chairman; Nicholas Andronis, H. Reid Robinson, and Lou Tomlinson.

Public Lectures.—C. T. Stone, Chairman; Raymond L. Gregory, D. J. Herrington, Charles F. Mares, John McGivney, Edward Randall, Jr., and Edward H. Schwab.

Publicity.—William B. Sharp, Chairman; Paul Brindley, George T. Lee, Leonard Twidwell, and Stephen Weisz.

Hotels.—E. S. McLarty, Chairman; Hamilton Ford, Emil Klatt, Charles F. Mares, and N. Prujansky.

Entertainment.—W. S. Wallace, Chairman; John Delany, Titus H. Harris, J. L. Jinkins, George McReynolds, Edward Randall, Jr., Edward Thompson, and Herman Weinert.

Halls and Lanterns.—Jack R. Ewalt, Chairman; Norman D. Schofield, Fred W. Shelton, Clarence Sykes, John Thiel, and Weldon White.

Alumni Banquets.—George Herrmann, Chairman; Virginia Blocker (AET), A. Magliolo (NSN), Hamilton Ford (PBP), Herman Weinert (PC), H. Roosth and Alfred Tocker (PDE), Edward Schwab and Burt Breath (PRS), Capt. Milton Laughlin (TKP), and Sam Barns (AKK).

SECTION SPONSORS

Medicine.—Stephen Weisz and George Decherd.

Surgery.—F. W. Aves and S. R. Snodgrass.

Obstetrics and Gynecology.—J. L. Jinkins and H. Reid Robinson.

Eye, Ear, Nose, and Throat.—George McReynolds and William B. Potter.

Radiology and Physiotherapy.—Jesse B. Johnson and Chester N. Frazier.

Public Health.—Charles Mares and William D. Sharp.

Clinical Pathology.—H. H. Sweets, Jr. and Norman D. Schofield.

Pediatrics.—Arild Hansen and Boyd Reading.

Changes in 1946 Section Officers.—In the last number of the JOURNAL announcement was made of the dates selected by the Executive Council for the 1946 Annual Session which will be held in Galveston May 6, 7, 8, and 9. The Council unanimously accepted the gracious invitation again extended by the Galveston County Medical Society to meet in that city, it having been necessary, because of the war, to cancel the 1945 session scheduled for Galveston.

In the announcement in the January JOURNAL the names and addresses of the officers of the eight scientific sections were published, and members of the Association who desired to appear on the program were urged to offer papers to officers of the appropriate sections. It was pointed out that such offers should be made immediately since section officers will be required to complete their programs in a much shorter period of time than is ordinarily available; that the programs of the sections are customarily completed and closed at a midwinter meeting of the Council on Scientific Work about January 15 each year. Since decision regarding the Annual Session dates and place was made so late because of war conditions, the section programs will not be closed this year until February 24, on which date the Council will meet at Waco for final decision regarding all features of the 1946 Annual Session.

The purpose of this editorial is to call attention to a change in the officers of the Section on Public Health since the list of section officers was published, occasioned by the resignation of Dr. V. E. Schulze, San Angelo, and Dr. T. E. Dodd, State Health Department, Austin, chairman and secretary, respectively. Dr. Schulze found it necessary to resign because of many demands being made on him in other matters, and since he and Dr. Dodd had built a very fine program for the 1945 Annual Session, cancelled because of the war, the papers of which have been since published, they felt that the honor and responsibilities should be passed to others.

President Dr. Connally has appointed to take their places:

NEW OFFICERS SECTION ON PUBLIC HEALTH

Dr. George A. Gray, Chairman, 319 East Vance St., Tyler.

Dr. L. P. Walter, Secretary, State Health Department, Austin.

Any member who wishes to present a paper on the program of the Section on Public Health should communicate at once with either or both of the new officers, Dr. Gray and Dr. Walter. We are sure that any communications with the previous officers of the section will be passed by them to the new officers.

Likewise, there is still time for any who wish to offer papers for any of the seven other scientific sections, programs for which will not be closed before February 24. Reference is made again to the list of section officers and their addresses published in the January JOURNAL (pages 443-444). The time is short, and any member interested should take immediate action.

Present Status of the National Effort to Socialize Medicine.—Under date of December 10, 1945, Thomas Parran, Surgeon General of the U. S. Public Health Service, addressed the following amazing and astonishing letter to all physicians of the United States holding commissions in that branch of service, whether on active duty or in the reserve, many of whom are private practitioners who accepted such commissions during the recent national emergency as a patriotic service in the civilian defense program:

Federal Security Agency
U. S. PUBLIC HEALTH SERVICE
Washington 14
(Bethesda Station)
December 10, 1945

TO: All officers of the Public Health Service

SUBJECT: The National Health Program

Enclosed is a copy of House Document No. 380 which is the full text of President Truman's mes-

sage to the Congress on a National Health Program, a subject of the highest importance to every citizen. The message contains a comprehensive analysis of the health problems of the country and recommendations as to the pattern of legislation to deal with them.

It is a source of particular satisfaction to all of us who labor for the public health advancement that this should be the special subject of a Presidential message. For the first time we have the major elements of a national health policy officially stated in comprehensive terms. This has been a goal of all public health workers for many years, and the enunciation of such a policy by the Chief Executive gives the Public Health Service definite objectives for its future work.

On the same day as the message was delivered, Senator Wagner introduced (for himself and Mr. Murray) S. 1606 and Representative Dingell introduced H. R. 4730 designed to implement the proposals of the President. In addition, several bills are pending in the Congress dealing with special phases of the President's legislative program. These include the hospital construction bills, the national mental health bills, and the stream pollution bills, each of which would impose substantial additional responsibilities upon the Public Health Service.

The appropriate executive agencies of the Government have been specifically instructed by the President to assist in carrying out the legislative program as presented to the Congress on September 6th. The President wrote to the Administrator of the Federal Security Agency on October 4th requesting him "to take primary responsibility for legislative measures necessary to carry out the part of my message (September 6, 1945) outlined in Section 21 concerning a national health program to provide adequate medical care for all Americans and to protect them from financial loss and hardship resulting from illness and accident."

Every officer of the Public Health Service will wish to familiarize himself with the President's message and will be guided by its provisions when making any public statement likely to be interpreted as representing the official views of the Public Health Service.

(Signed) Thomas Parran
Surgeon General.

The text of that letter was called to the attention of the editors of the JOURNAL in a communication received from Dr. A. O. Singleton, of Galveston, the distinguished professor of surgery of the University of Texas School of Medicine, widely known and beloved by Texas physicians. Dr. Singleton no doubt received one of these letters by virtue of the fact he holds a reserve commission in the U. S. Public Health Service, accepted patriotically during the war in the Emergency Civilian Defense program. Shortly after receipt of the letter quoted here from Dr. Singleton, on January 9, 1946, there appeared an editorial in the January 12, 1946, number of *The Journal of the American Medical Association* (page 84), calling attention to this latest astonishing development in the effort to force through Congress a program of compulsory sickness insurance which would regiment American medicine and the American public. Physicians of Texas are urged to read the brief, concise editorial in *The Journal of the American Medical Association* referred to, entitled, "General Parran Addresses His Officers."

It will be recalled that when Senators Wagner and Murray and Representative Dingell introduced their first bills into the last Congress, about two years ago, medical officers of the U. S. Public Health Service used every possible opportunity to emphasize that General Parran did not favor those bills, and even furnished statements from General Parran expressing his opposition, which editors of medical journals were urged to publish. The finger of suspicion has long been pointed at the Surgeon General of the U. S. Public Health Service as being in favor of socialized medicine. Developments which have taken place in national public health organizations, such as the American Public Health Association and particularly the State and Territorial Health Officers group, which have been materially influenced by the thinking and social philosophy of the present Surgeon General of the Public Health Service, have tended to magnify the suspicion as to his position on the subject of socialized medicine. Now there is no doubt about it. He has come out openly for it.

Thus, added to such influence as the President of the United States may possess at the time with the Congress, comes the weight of the opinion and influence of Surgeon General Parran backing a socialized medicine program. We do not for a moment believe that even a majority of physicians holding active commissions in the U. S. Public Health Service are in accord with General Parran. We doubt, however, that they will do much about their views because of their tenure of office.

We are certain, however, that the great number of physicians in independent practice holding reserve commissions in the Public Health Service will refuse to be muzzled on this subject. They will insist on the privilege of disagreeing with the statements of the President and the Surgeon General that compulsory sickness insurance will improve medical care in the United States.

Since the President delivered his message to Congress calling for a program of compulsory sickness insurance to be conducted by the federal government for all the people of the United States, and since General Parran came out in the open in support of such program, a partial poll of Congress, conducted by the Associated Press, in which views of about one-fourth of the members were recorded, reveals a ratio of 7 to 4 against "President Truman's proposal for a national compulsory prepaid 'health insurance' system," the Houston *Chronicle*, among many other papers, advises. It is stated that, "One

hundred and forty-one ballots were returned. Of these, 72 voted 'no' and 43 voted 'yes.' Seventeen were 'undecided,' three were 'noncommittal,' and six others gave qualified answers.

"Of the 141 ballots returned, 75 were from Republicans, 63 from Democrats, one from an American Labor party member, and two by Congressmen who did not give their party designations. (Many of the ballots were returned by mail.)"

It was further reported that the ballots returned represent geographically large sections of the country.

These developments are strong reminders that if the regimentation of medicine and the public, first definite and enormous step toward general socialization of all professions and other groups composing our great democratic republic, is to be avoided, we must see to it that the people who will be affected know the true ungarnished facts regarding what this will mean to them and to those who come after them, so that they will make their desires known to their Congressmen in no uncertain language.

We must confess some amazement that the proponents of the socialistic measure advanced by Wagner, Murray, and Dingell could muster even as much strength as indicated in the Associated Press poll of one-fourth of the members of the Congress. We believe that when "counting" votes are recorded on this measure, their percentage will be much less than 4 to 7. As a basis for such belief we have confidence in the frank, unequivocal statements of 19 of the 23 Texas members of Congress that they are opposed to the Wagner-Murray-Dingell bills in particular and socialized medicine in general. And be it noted that all of the Texas delegation are Democrats, which party members did not appear to be as strong against President Truman's "health program" as the Republican opposition.

Be that as it may, each doctor of medicine has a personal job of public relations to do with the people who look to him for guidance and counsel regarding all matters pertaining to their health and that of their families, and he must take the time and make the effort necessary to do the job in his day to day contacts. Medicine individually as well as collectively owes that duty to itself and to the public it serves. Let's keep America American!

"Socialize Everything or Nothing!" Under this caption, the November 15, 1945, number of *The New York State Journal of Medicine* carried a very apt and pertinent editorial. It has long seemed strange to doctors that the socialists, parlor-pinks, and reds, not to mention the do-goods and the severally misguided groups of wishful thinkers of our country, should pick the vocation of medicine as one of the principal points of assault on free enterprise, with the view of setting up a socialistic republic in this country, with all of the bizarre ideologies of Europe, from whence came the idea of socializing medicine. Beyond any doubt the purpose of the movement to socialize medicine is in line with the general purpose of socializing everything, but why pick on medicine? The psychology of the situation quite probably involves the reasoning that whereas medicine is a Good Samaritan proposition, and doctors are mainly actuated in the study of medicine by their desire to serve humanity by minimizing and preventing illness, and suffering from illness, and postponing the inevitable, they would welcome, or at least not resent and resist, any plan which would widen the scope of their activities and provide for their maintenance, with no thought of economics.

This line of reasoning ignores two very patent factors, one of which could be overcome, but the other never, if we are to maintain medical service upon the high and very satisfactory plane of the present day. First, it takes many years and much money to become a worthwhile physician. Second, the practice of medicine is so personal that no amount of scientific attainment and no law or plan of regimentation can compensate for the personal element. Even so, once the practice of medicine as a private enterprise and on the basis and after the plan set up by the medical profession through the years has been abandoned, these beneficial and highly desirable factors will be lost to the world, and may or may not be reborn. The people will not miss them in the future, because they have not known anything about them. We can yearn for something of which we know nothing, which is why progress has been made in medicine as elsewhere, but we cannot miss something about which we know nothing.

It is significant that while only a handful of physicians in this country are in favor of socializing the practice of medicine, the great body of American doctors intuitively and automatically oppose it. They become militant against it when they are fully advised as to what it is all about, and what it means to their people. But let us quote a pertinent paragraph from the editorial referred to above:

"There seems little cause to 'socialize' medicine and to stop there. Free medicine is now working well, advancing, making progress, as everyone knows, in

a free economy. Should we 'socialize' medicine and not the patients? Should we 'socialize' medicine and not the manufacturers who make the drugs, the appliances, the automobiles, the surgical instruments, the biologic products which medicine uses? And how about the labor unions whose members make the things that doctors need? Shall they be 'socialized' also?"

The Dallas Southern Clinical Society, the pioneer organization in Texas in the annual presentation of clinical conferences featuring out-of-state speakers of national reputation as teachers of medicine and clinicians of the first rank, will conduct its fifteenth annual conference in Dallas March 18, 19, 20, and 21, with headquarters at the Adolphus Hotel. This will be the first conference held by the Society since 1942, during which year the global war from which we have only recently been released made such excessive demands on the abilities and manpower of medicine, as well as that of every part of American life, as to make necessary the abandonment of all but the most essential projects, in order that the nation as a whole might devote its complete energies to winning that conflict. It is fitting that this conference as the pioneer movement of this sort in the state should again lead off in the around-the-year postgraduate study and work which has kept Texas doctors well abreast of scientific advancement and, indeed, in places of leadership in medicine in this country.

This year's conference will be conducted along the same general lines as its predecessors. It is built around the teaching abilities of the following twelve outstanding guest speakers who are authorities in their respective fields:

Dr. Charles A. Doan, Columbus, Ohio, medicine.
Dr. J. Arnold Bargen, Rochester, Minn., gastroenterology.
Col. John C. Woodland, Fort Sam Houston, military medicine.
Dr. Alfred Blalock, Baltimore, surgery.
Dr. John S. Lockwood, New Haven, Conn., surgery.
Dr. Richard H. Sweet, Boston, surgery.
Dr. Reed M. Nesbit, Ann Arbor, Mich., urology.
Dr. Joe V. Meigs, Boston, gynecology.
Dr. Donovan J. McCune, New York City, pediatrics.
Dr. Ira H. Lockwood, Kansas City, radiology.
Dr. Edmund B. Spaeth, Philadelphia, ophthalmology.
Dr. A. C. Furstenberg, Ann Arbor, Mich., otolaryngology.
Dr. William H. Sebrell, Washington, D. C., basic sciences.

The guest speakers will be featured in General Assemblies, Afternoon Clinics, Round-Table Luncheon Conferences, Afternoon and Evening Symposia, and a Clinical-Pathological Conference. There will be three round-table luncheons each of the four days, one each in medicine, surgery, and eye, ear, nose, and throat, with an additional special luncheon for urologists on March 19 (Tuesday) and for pediatricians on March 21 (Thursday).

Dallas physicians, among whom are many with national reputations as clinicians and teachers, will deliver fifty-four postgraduate lectures on the three days of March 19, 20, and 21 dealing with practical problems in medicine which Texas practitioners meet every day. In addition, Dallas physicians, members of the Society, will conduct special clinics in the afternoon of March 20 (Wednesday) on topical subjects of great interest in the fields of medicine, surgery, and eye, ear, nose, and throat, with sections for each program.

While two evenings of the four days of the conference will be utilized for scientific programs—a clinical-pathological conference conducted by guest speakers on March 19 and a program of special subjects by guest speakers on March 20—entertainment features of proven popularity will be held the evenings of the first and last days. On the first night will be the Buffet and Smoker and on the last night the Annual Clinic Dinner with special entertainment features. These affairs are too well known to require embellishment here.

Physicians of Texas and the Southwest who are members in good standing in their county medical societies are cordially invited to attend this conference. A registration fee of $10 covers all features, including the luncheons and annual dinner. Physicians still in service will be accorded the courtesy of a registration fee of $5.

While the hotels of Dallas will do their best to care for the anticipated record breaking attendance of physicians denied for three years the pleasures and profit of clinical conferences, it is imperative that all who wish to attend make reservations well in advance. The address of the Secretary is 433 Medical Arts Building, Dallas.

Dues Are Due now, not next April. Of course, they will still be due next April if not paid before then. The point we are making is that it will help a lot if everybody will pay up right away, rather than delay the matter until the last day. Peak-loads in any business are always burdensome. They are more burdensome the bigger the load in comparison with the routine. Neither the county society secretary nor the State Secretary will be ready for any considerable additional burden in this connection. It will cost no more to pay now than to pay later, and it is as convenient to pay now as it will be later. The secretaries concerned in the matter of payment of dues will appreciate any relief they may have in this connection.

If our members pay promptly, and their county society secretaries remit as the money accumulates, the State Secretary can in an orderly manner and with less likelihood of mistakes in accounting, receipt everybody and supply membership cards without delay.

There is still some confusion as to the dues to be collected by county society secretaries. Perhaps it is well to reiterate. The regular State Association membership dues are $20.00, to which must be added the amount needed for local expenses. The dues are, in fact, whatever the county society sets up, of which amount $20.00 goes to the State Secretary. Intern and Honorary membership dues are $4.00, and Military membership $1.00. Whether county societies should add any local expenses to these remains with the county medical societies. There are no Membership Emeritus dues. JOURNAL subscription ($3.00) is included in dues of all classifications except Military. Medical Defense is included in all classifications. That is the reason for the $1.00 charged for Military membership. And, it should be observed in passing, no physician, whether in or out of the Armed Forces, is free from the possibility of medical malpractice suits.

There seems to be some misconception as to the periods for which membership and subscription to the JOURNAL are paid, in the payment of dues. The membership year is from January to January. Subscription to the JOURNAL is from May to May. On the first day of January, membership ceases, except and unless dues for the incoming year are paid by that time. However, there is no accounting from this angle until April first, at which time county society secretaries are supposed to file their annual reports with the State Secretary. So, until that time, the State Secretary does not know who has not paid. All he knows is that county society secretaries have paid for certain members. After the county society annual report has been filed, all former members of the society whose names do not appear on these reports are definitely not members. However, they can renew their membership at any time during the calendar year by simply paying their dues. After the expiration of the calendar year, membership for these former members may be renewed only upon reapplication and re-election to membership status by the county medical societies concerned. There is no such thing as a delinquent member of the State Association. There are former members who have not paid, but they are not members any more, and don't owe anything. When they join again, they simply pay dues for the year in which they join. We appreciate that these iterations and re-iterations are tiresome, but they seem to be necessary.

We would close this editorial with the admonition that never before has there been such need for a closely knit medical profession, not only of this State, but of the Nation. If the art and the science of medicine and its vocational application are to be preserved and our people protected from the ills and damages of regimentation, we must do something about it, do it now, and without stint.

University of Texas Postgraduate Courses.—Additional information has been released by Dr. George M. Decherd, director of the Postgraduate Division, on the special courses to be given at the University of Texas School of Medicine during March and April. Physicians interested in registering should communicate promptly with Dr. Decherd. The courses are as follows:

Physical Medicine, March 4-7. Among the speakers will be Dr. Frank Krusen, Professor of Physical Medicine, Mayo Foundation, University of Minnesota, and Head, Section of Physical Medicine, Mayo Clinic, author of the textbook "Physical Medicine"; Dr. Richard Kovacs, Professor of Physical Medicine, New York Polyclinic Medical School and Hospital, author of several textbooks on physical medicine; Dr. Nathan N. Polmer, Professor of Physical Therapy, Louisiana State Medical School, New Orleans; Dr. Joseph Molner, Consultant, National Foundation for Infantile Paralysis, Department of Health, Detroit, Mich.; Dr. Robert L. Bennett, Director of Physical Medicine, Georgia Warm Springs Foundation; Dr. Robert F. Dow, formerly Chief of Physical Medicine, Army-Navy Hospital, Hot Springs, Ark.; Major A. B. C. Knudson, Assistant Chief, Division of Physical Medicine, Veterans Administration, Washington; Dr. Arthur M. Pruse, formerly Chief of Physical Therapy, Lawson General Hospital, Atlanta, Ga.; Dr. Marcus J. Stewart, formerly Commanding Officer, 827th Convalescent Center, England; Drs. J. J. Brown and J. L. Tenney, Austin; Dr. Ray K. Daily, Houston; and members of the University of Texas School of Medicine staff. The course will include instruction in the theory and the technic of application of the various physical agents and will emphasize the practical, clinical aspects of physical medicine. The last day, March 7, will be devoted to a discussion of rehabilitation, in conjunction with the following course. Physicians and physiotherapists are eligible.

Industrial Psychiatry, March 7-8. Sponsored by the Department of Neuro-Psychiatry and the Hogg Foundation for Mental Hygiene, the course will consist of practical suggestions and discussions on psychiatric problems in industries, the organization of psychiatric consultation services, and the efficient use of such services by personnel managers and industrial health physicians. The principal speakers will be Dr. Lydia Giverson, Chief Psychiatrist for the Metropolitan Life Insurance Company and one of the country's authorities on industrial health problems, and Dr. Victor Vogel, Assistant Chief Medical Officer of the Office of Vocational Rehabilitation, U. S. Public Health Service.

Obstetrics, March 11-16. This course will cover almost the entire field of obstetrics, discussions being limited to new and current ideas and methods applying to individual topics. The tentative list of guest speakers, subject to acceptance, follows: Dr.

Bayard Carter, Durham, N. C.; Dr. A. H. Dippel, Houston; Dr. H. W. Johnson, Houston; Dr. R. A. Johnson, Houston; Dr. E. L. King, New Orleans, La.; Dr. W. F. Mengert, Dallas; Dr. R. D. Mussey, Rochester, Minn.; Dr. E. A. Schumann, Philadelphia, Pa. The nonobstetric complications of pregnancy will be discussed by members of appropriate departments of the Medical Branch; and fundamental principles will be discussed where appropriate by members of various preclinical departments. This course is under the sponsorship of the Maternal and Child Welfare Division of the Texas State Board of Health, which will underwrite the tuition and expenses of sixty-five postgraduate students.

Internal Medicine, March 25-30. This course in general internal medicine is sponsored by the American College of Physicians. Members of the College and officers in the Armed Forces will receive preference in registration. Other places, up to a maximum of fifty, are open to any medical practitioner. Applications for registration for this particular course should be obtained from the headquarters of the College, 4200 Pine Street, Philadelphia, Pa.

Pediatrics, April 15-20. A one-week postgraduate course which will be a concentrated session of lectures, clinics, and demonstrations by medical school faculty and invited guest speakers will be limited to forty physicians. During April, May, and June there will be a special refresher residency training program for licentiates of the American Board of Pediatrics or physicians who have had the equivalent of two years of pediatric training. This residency program will be limited to six.

CURRENT EDITORIAL COMMENT*

Psychologic Health in Children.—No longer is it sufficient in caring for children to look only after their physical well being and administer the known immunizations. Physicians must know the normal paths in the emotional development of infants and children, must know when and how deviations occur and be able to recognize and prevent or remedy these deviations before they become too harmful.

Children respond to many urges and perhaps the most consistent urge is that of securing some satisfaction or dividend from their environment. A baby a few weeks old knows when it pays to cry and if the dividend results from crying (usually the attention of a nurse or mother) then the infant will work on that basis and so cry more and more for the resulting dividend. This educated dividend-getter is sometimes called "spoiled." If the desired result consistently is not secured, the child will gradually cease to cry, and thus the "spoiled child" becomes unspoiled; being spoiled failed to pay dividends. Using this urge we frequently can guide children into a more proper behavior that is acceptable.

Determine what dividend the child desires and, if right, let that satisfaction accrue to the child for doing those things considered upright, honorable, and suitable.

Another factor of great importance in preventing emotional maladjustment is consistency or dependability in those caring for the child. Where this exists there is usually a sense of security in children. Without it there is uncertainty, lack of dependence, a seeking for dependability in others or self; fears, phobias, and very unsocial acts and attitudes may develop. This is called a lack of sense of security and may be the beginning of emotional maladjustment in children. They need this sense of dependability and security for proper development.

This dependability will pay great dividends to parents during those trying times of adolescence. If such reliability and sense of security has not been acquired by the child prior to adolescence, that stage will often be too late for the parents to provide it and help it develop in these unstable individuals. Truly the problems of adolescence are solved long before the child reaches that age or they go unsolved.

Children should be reared in an atmosphere permeated with love. This love should surround, infiltrate, and be ever present in the life of the child. Almost all action in childhood and adult life comes as a result of love of something. In my observation this love of children is not always truly comprehended and grasped by the child, maybe through lack of expression, maybe through inconsistent action, at times through lack of comprehension on the part of the parents.

Little boys and girls who starve for love are seen, and I have heard boys with tears in their eyes, not "show-offs" or "smart" children but truly sad children, say, "Nobody loves me at my house." These poor maladjusted children are victims of adult neglect. If a parent will take time to show and demonstrate love in the family, great and good results will come.

This love expressed, acted out in knowing the ways of children and their desired dividends, and acted out with a consistent, dependable attitude will aid in preventing psychologic ill-health in children.

This is not all that might be written, but these few points will aid in preventing the development of problem children and instead make for happiness in childhood and be a step toward adult mental health also.

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*This department of the JOURNAL presents editorial comments on current items pertaining to the science, art and practice of medicine, contributed by members of the State Medical Association and scientists closely associated with the medical profession of Texas. Invitation is hereby extended to any member of the State Medical Association of Texas to submit such discussions for this department. The discussions should not be more than 500 words in length.

NEPHROTIC EDEMA IN DIABETES MELLITUS

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The occurrence of edema in diabetes mellitus has been recognized for many years[7]. Kramer[10], in a discussion of hypertension and diabetes, noted that some diabetics developed a clinical picture very similar to that found in nephrosis, viz., proteinuria, hypoproteinemia and edema. Likewise, Volhard[15] recognized the existence of such a syndrome. He, however, never observed a primary lipoid nephrosis in diabetes mellitus, but observed that some elderly diabetic patients had a secondary nephrosis characterized by a marked albuminuria, albuminuric retinitis, hypertension and arteriosclerosis. The kidneys of such patients showed sclerosis and secondary parenchymal degeneration.

Kimmelstiel and Wilson[9] were the first to note the association of diabetes, marked proteinuria and a nephrotic type of edema, with or without renal insufficiency or hypertension, with a characteristic renal glomerular lesion which they termed intercapillary glomerulo-sclerosis. The kidneys of such individuals presented rather diffuse involvement of all glomeruli by a massive hyalinization localized in the center of each glomerulus, or sometimes in the center of a single lobule. When prominent, the hyalinization was round in shape, bordered at the periphery by a ring of open capillaries. The other capillaries of the tuft appeared to have disappeared in the mass. In less advanced stages, concentric layers of flattened nuclei surrounded the hyaline mass. The arterioles showed marked hyalinization with fatty degeneration. Occasionally, the thickened hyalinized wall of the afferent arteriole was found to extend into the mass, while in other glomeruli the afferent arteriole appeared normal. The capillary basement membrane was thickened but never wrinkled or split. Deposition of hyaline material, which frequently contained lipoid, occurred between the basement membrane and the epithelial layer of Bowman's capsule. A later stage of this process was accompanied by fibrosis of the capsule. The tubules and interstitial tissues showed no significant changes other than a marked deposition of fat and doubly refractive lipoid in some areas. The intercapillary glomerulosclerosis found in diabetic patients was thought to be merely an advanced and severe degree of the aging process found frequently in the glomeruli of senile kidneys.

Further investigation has modified Kimmelstiel and Wilson's[9] original concept of intercapillary glomerulosclerosis. While they believed that the characteristic glomerular lesion was caused by a thickening and hyalinization of the intercapillary connective tissue of the glomerulus, Allen[1] advanced the opinion that the process represented a hyalinization of the capillary wall and basement membrane. Laipply, et al.,[11] concurred with the latter view. Kimmelstiel and Wilson said that the specific lesion was of infrequent occurrence in diabetes mellitus. Subsequent study has shown that it may occur frequently enough in diabetes mellitus to be used as a morphological sign in the histological diagnosis of the disease.[1, 4, 5, 6, 11]

There is no agreement as to the presence of any constant clinical syndrome in those diabetic patients who show the lesion of intercapillary glomerulosclerosis histologically. Although Kimmelstiel and Wilson[9] observed that varying stages in the development of the morphological lesion occurred, the clinical syndrome they described was based on their findings in 8 patients whose kidneys showed an extreme type of intercapillary glomerulosclerosis. Anson[2] was the first to note that a nephrotic syndrome did not occur in all of the patients with intercapillary glomerulosclerosis. Only 2 patients of the 6 cases he reported had the fully developed syndrome. Newburger and Peters,[12] after reviewing the cases of intercapillary glomerulosclerosis reported by Kimmelstiel and Wilson and Anson, together with their own, found that the most constant clinical features in this group of 18 cases were mild diabetes, hypertension, retinal vascular changes and albuminuria. They found the nephrotic syndrome to be common; the degree of edema present was proportional to the degree of hypoproteinemia, and the latter was dependent upon the balance between the protein lost in the urine and the protein content of the diet. Porter and Walker[13] were of the opinion that the full nephrotic syndrome was the termination of a progressive and accelerated aging process occurring in mild diabetic patients over 40 years of age. Weiss[16] stated that the focal lesion of intercapillary glomerulosclerosis was frequently an accidental microscopic finding without clinical significance; well-developed and prominent lesions, however, showed a tendency to be associated clinically with proteinuria, hypoproteinemia, and a tendency to anasarca, with or without hypertension.

Siegal and Allen[14] found a close correlation

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of the anatomical lesion with a nephrotic picture. When the lesion was not prominent, no constant clinical syndrome was found. A tendency to marked albuminuria and hypoproteinemia was noted in those diabetics with prominent renal lesions. In 3 of their 10 cases in which these advanced lesions were found, the nephrotic syndrome was present clinically. In the others, coronary thrombosis, heart failure or peripheral vascular disease dominated the clinical course. In some of their diabetic patients with intercapillary glomerulosclerosis there were no signs of renal damage or hypertension. They noted the presence of intercapillary glomerulosclerosis occasionally in non-diabetic individuals. The renal lesion, according to these authors, could be diagnosed clinically only in diabetics when there was a syndrome consisting of hypertension, azotemia, marked edema, lowered blood protein, hypercholesteremia and death in uremia. They regarded edema or persistent albuminuria in a middle-aged diabetic patient as of serious diagnostic import.

Horn and Smetana[6] pointed out that while the advanced stage of intercapillary glomerulosclerosis was found only in kidneys of diabetic patients, a particular clinical syndrome which included diabetes mellitus was not necessarily found in every patient with this lesion. They found the specific glomerular change in 22.9 per cent of 144 cases of diabetes mellitus, 25.4 per cent of 126 cases of nephrosclerosis, 11.1 per cent of 81 patients with generalized arteriolarsclerosis without diabetes or renal disease, and in 6.5 per cent of 199 cases of glomerulonephritis. No specific clinical signs or symptoms were found to be associated with intercapillary glomerulosclerosis. Bell[3] stated that intercapillary glomerulosclerosis in diabetes mellitus could not be distinguished by clinical features alone from diabetes without these glomerular changes.

Laipply, Eitzen, and Dutra[11] found intercapillary glomerulosclerosis in 63.7 per cent of 124 diabetic patients but believed that it was uncommon in non-diabetic individuals. Some of their cases showed no correlation between the presence of the renal lesion and any typical clinical syndrome. Only 5 of their 79 patients with diabetes mellitus and intercapillary glomerulosclerosis showed the complete nephrotic syndrome. Albuminuria was present in most of the cases in which the renal lesion was advanced, but was absent in 6 of them. In two-thirds of their diabetic patients with hypertension, intercapillary glomerulosclerosis was found and two-thirds of the intercapillary glomerulosclerosis patients had hypertension.

Goodof[4] observed that 30 per cent of non-diabetic persons over 70 years of age and 10 per cent of individuals of all ages showed mild lesions of intercapillary glomerulosclerosis. He found the advanced lesions only in diabetics and observed that such patients might show albuminuria and impaired renal function. His criteria for the clinical diagnosis of intercapillary glomerulosclerosis were: (1) mild or moderately severe diabetes mellitus; (2) duration of the disease for six years or more; (3) female sex; (4) age of 45 years or more; (5) marked albuminuria which could not be explained on a basis of some other renal damage.

In summary, it may be stated that the characteristic renal lesion of intercapillary glomerulosclerosis in the advanced stage is found only in diabetes mellitus. Some of the patients with the advanced type of intercapillary glomerulosclerosis will present the clinical nephrotic syndrome. Others with the advanced lesion in the kidneys, apparently have no constant signs by which a clinical diagnosis of this renal lesion may be made. There appears to be no constant or typical clinical picture by which the lesser degrees of the morphological renal lesion may be recognized before death and necropsy examination.

This study was undertaken to determine the relative importance of intercapillary glomerulosclerosis in the pathogenesis of edema in diabetes mellitus. The period 1931 to 1944 was chosen for selection of cases used in this analysis. A total of 634 patients with diabetes mellitus was admitted to John Sealy Hospital during these years. Of this group, 500 case histories were found adequate for analysis. Table 1 presents the distribution of these cases by race and sex. Those patients with definite intercapillary glomerulosclerosis as described by Kimmelstiel and Wilson were studied for the incidence and pathogenesis of edema in each case. The 500 clinical histories were reviewed for the incidence of those with proteinuria and massive edema. When indicated, special connective tissue

TABLE 1.—*Distribution by Race and Sex, of 500 Cases of Diabetes Mellitus Admitted to John Sealy Hospital*

	White Males	White Females	Negro Males	Negro Females	Total	Percentage
Diabetes Mellitus	133	193	61	113	500	100
Deaths	44	47	21	31	143	(28.6% of 500 patients.)
Necropsy Examinations	11	6	10	15	42	(29.4% of 143 patients.)
Intercapillary Glomerulosclerosis	0	0	2	5	7	(16.6% of 42 autopsies.)

stains (azo-carmine) were made of the kidney sections.*

INTERCAPILLARY GLOMERULOSCLEROSIS

Intercapillary glomerulosclerosis was found in 7 patients, or 16.6 per cent of the 42 diabetic patients examined at necropsy. The pertinent clinical and pathological data are summarized in Table 2. There were 5 females and 2 males, all of whom were over 45 years of age. They had either a mild or a moderately severe diabetes. All 7 individuals were Negroes. Generalized arteriosclerosis legs was found in 2 individuals during cardiac decompensation; in none of the group was there widespread and massive edema. At necropsy, the degree of intercapillary glomerulosclerosis was considered to be marked and advanced in 2 patients; the others showed moderate or minimal degrees. Fibrosis of the Islands of Langerhans was found in none of the 7 persons. The cause of death was due to cardiac failure in 3 patients, infections with or without diabetic coma in 3 persons, and in the seventh patient the cause of death was not established at

TABLE 2.—*Patients With Intercapillary Glomerulosclerosis*

UNIT CASE NO.	35301	17350	63188	61214	73469	24841	43221
SEX	female	female	male	female	male	female	female
AGE IN YEARS	48	53	65	53	73	66	71
DURATION IN MONTHS OF							
(a) Diabetes mellitus	25	21	24	32	?	154	81
(b) Hypertension	48	39	?	?	?	135	35
(c) Proteinuria	8	24	?	12	?	24	3
SEVERITY OF DIABETES	moderate	moderate	mild	moderate	mild	mild	moderate
BLOOD PRESSURE—Systolic	238	90*	124*	210	140	180	182
(mm. of Hg.) —Diastolic	130	60	90	140	70	105	110
AMOUNT OF ARTERIOSCLEROSIS	moderate	slight	mod. severe	moderate	moderate	moderate	mod. severe
FUNDOSCOPIC FINDINGS		arterio-sclerosis; hemorrhages exudate	arterio-sclerosis hemorrhages exudates	arterio-sclerosis cataract rt. lens	arterio-sclerosis		arterio-sclerosis
EDEMA	none	legs	legs	none	none**	none	none
CARDIAC FAILURE (Functional capacity)	no failure	Grade III	Grade III	no failure	no failure	no failure	no failure
DEGREE OF PROTEINURIA	trace	++	trace	++++	+++	++++	trace
BLOOD CHEMISTRY							
(a) Serum Protein (gm/100 c.c.)		6.53#	5.99	5.32			4.90##
(b) Cholesterol (mg./100 c.c.)		200		300	278	166.6#	231##
(c) Non-protein nitrogen (mg./100 c.c.)		35.7	39.0	48.0	50.8		61.0
GRADE OF INTERCAPILLARY GLOMERULOSCLEROSIS	moderate	marked	moderate	moderate	mild	marked	moderate
OTHER KIDNEY PATHOLOGY	Benign nephro-sclerosis	Benign nephro-sclerosis pyelonep-hritis, rt	Benign nephro-sclerosis	Benign nephro-sclerosis	Benign nephro-sclerosis	Benign nephro-sclerosis	Benign nephro-sclerosis
REMARKS	Pulmonary edema	Old in-farct left ven-tricle; dry gang-rene, both feet.	Coronary thrombo-sis	Lobar pneumonia	Pulmonary tubercu-losis; gangrene right foot	Fracture left and right femurs; edema of lungs & brain; hypostatic pneumonia	Pituitary necrosis Pulmonary tubercu-losis; Diabetic coma

*—Hypertension noted on previous admissions
**—Inflammatory edema of right leg
#—Determination done 2 years previous to last admission
##—Determination done 9 months previous to last admission

was noted in each, both clinically and at necropsy. All excreted protein in the urine for varying periods of time up to two years previous to death. Hypertension was found in 6 patients. Fundoscopic examination in 3 patients showed arteriosclerosis and in 2 others more severe vascular changes, including exudates and hemorrhages. Significant degrees of nitrogen retention were found in none of the group. Serum protein levels below 6.0 Gm. were observed in 3 out of 4 patients in which such a determination was recorded; moderate hypercholesteremia was found in 2 patients. Pitting edema of the autopsy although, clinically, this patient's sudden death appeared to be cardiac in origin.

There was no tendency apparent towards a correlation between the severity of intercapillary glomerulosclerosis and the duration of either the diabetes mellitus or the hypertension. Thus, a marked degree of intercapillary sclerosis was found in Case 24841 in which the duration of the diabetes was 154 months and the duration of the hypertension was 135 months. Case 17530, also showed a marked degree of the renal lesion, but the duration of the hypertension was 39 months and that for the diabetes 21 months. The patient in Case 43221, who had known

*Through the kindness of Dr. Paul Brindley, Professor of Pathology, University of Texas, School of Medicine, Galveston.

TABLE 3.—*Patients With Massive Edema.*

UNIT CASE NO.	14149	37865	84165	14982	63093	28488	60714	33979	58953	69182	49730
RACE	negro	white	negro	white	negro	negro	white	white	white	negro	negro
SEX	male	female	male	male	male	female	female	female	male	female	female
AGE IN YEARS	57	62	40	69	57	46	60	26	75	58	47
DURATION IN MONTHS											
(a) Diabetes mellitus	diag.	19	diag.	48	209	60	?	119	?	40	?
(b) Hypertension	144	79	3	36	203	?	?	2	?	?	?
(c) Proteinuria	?	12	?	0	43	60	?	?	?	?	?
SEVERITY OF DIABETES	mild	mild	mild	mild	mild	mild	mild	severe	mild	moder-ate	severe (coma)
BLOOD PRESSURE—Sys.	150	154	190	144	228	150	180	168	185	195	250
—Dias. (mm. Hg.)	100	110	130	104	140	110	110	100	100	115	100
AMOUNT OF ARTERIO-SCLEROSIS	severe	moder-ate		moder-ate	moder-ate	moder-ate	moder-ate	slight	slight	moder-ate	
FUNDOSCOPIC FINDINGS					art. sclerosis later cataracts				severe art. sclerosis	art. sclerosis hemorrhages exudate	
CARDIAC FAILURE (Functional Capacity)	Grade IV	Grade IV	Grade IV	Grade IV	Grade IV	Grade IV	Grade IV	Grade IV	Grade I	Grade IV	
DEGREE PROTEINURIA	++	++++	++++	0	+++	++	+++	++	+++	++++	0
BLOOD CHEMISTRY											
(a) Serum protein (gm./100 c.c.)	3.73	5.68	4.9 to 7.6	7.45	4.5 to 7.6	5.37	5.8	6.02	5.01 to 4.3	6.5 (alb. 2.7)	
(b) Cholesterol (mg./100 c.c.)				185			167			267	
(c) Non-protein nitrogen (mg./100 c.c.)	33.3	Urea N 41.5	33.0	58.0	42.8 to 60.0	(Urea N 21.4)	46.0	23.0 to 60.0	28.0	50.0	
RESPONSE OF EDEMA TO CARDIAC THERAPY	yes	no	yes		yes	yes	no	yes	no	yes	
REMARKS	Benign nephro-sclero-sis Pulm. TB Autopsy	Benign nephro-sclero-sis Autopsy	Living less edema with therapy	Dead of Cong. Ht. Fail-ure	Dead of coro-nary Occlu-sion	Dead of Cong. Ht. Failure	Dead of Cong. Ht. Failure	Dead of Pulm. TB	Living Nutri-tional defici-ency	Dead	Dead Diabe-tic coma

diabetes mellitus for 81 months and hypertension for 35 months, showed a moderate degree of intercapillary glomerulosclerosis. A moderate intercapillary glomerulosclerosis was noted in Case 35301 where the hypertension was 48 months duration and the diabetes 25 months in duration. In the remaining 2 cases the diabetes was less than three years in duration and the duration of hypertension was not established. Both showed moderate sclerosis in the glomeruli.

Albuminuria was marked in degree in 3 patients. The intercapillary glomerulosclerosis was marked in one, moderate in the second and mild in the third. Marked albuminuria occurred in the second patient with lobar pneumonia, in the third patient with a cellulitis and gangrene of the right leg complicated by diabetic acidosis. The first patient, who had a marked albuminuria for two years preceding death, had a cord bladder. In 6 of the 7 patients, the duration of albuminuria was less than two years preceding death. There was no evidence of marked renal insufficiency in any of the patients. Another patient with a severe grade of intercapillary nephrosclerosis, excreted only moderate amounts of albumin. There was no apparent correlation in this group of patients between the extent of the anatomical lesion in the kidney and the severity of proteinuria.

The serum protein determinations were done during the last year of life in 3 individuals. In all three there were less than 6.0 Gm. of serum protein. No correlation was found between the serum protein level, the hypoproteinemia and the degree of intercapillary glomerulosclerosis present.

From this small group of patients with intercapillary glomerulosclerosis, no positive

evidence is presented as to the role of intercapillary glomerulosclerosis in the causation of nephrotic syndrome. Individuals with a markedly advanced intercapillary glomerulosclerosis do not necessarily show a nephrotic syndrome, as has been demonstrated by others.[2, 6, 11, 14]

MASSIVE EDEMA

Among 500 cases of diabetes mellitus, there were 80 patients who showed dependent edema, due usually to heart failure. In addition, there were 11 patients whose generalized edema was suggestive of the nephrotic variety, with swelling of the face, extremities and body. Table 3 summarizes the data from each of these 11 patients. In 8 patients, the severe edema was due to congestive heart failure, as shown by the elevated venous pressure and favorable response to digitalis medication. Two other individuals presented a clinical picture suggestive of the nephrotic syndrome described in intercapillary glomerulosclerosis but this diagnosis could not be definitely established. The eleventh patient showed massive edema in the presence of diabetic coma, but insufficient data were accumulated during the few hours before death to permit the determination of the pathogenesis of the edema; this case is excluded from further consideration, since the absence of proteinuria rules out intercapillary glomerulosclerosis as a cause of the edema.

Cases 14149 and 37865 were of interest because each presented many of the clinical features reported in intercapillary glomerulosclerosis, i.e., diabetes, proteinuria, hypoproteinemia, and generalized edema. There was a progressive renal failure in Case 37865. At autopsy, these kidneys showed only nephrosclerosis. Death in the first case was due to pulmonary tuberculosis and in the second to congestive heart failure. The glomeruli in the second case showed some broadening between the capillary loops suggestive of the aging process described by Kimmelstiel[8] in arteriosclerotic kidneys. There was nothing suggestive in the kidney of the marked degrees of hyaline change found in advanced cases of intercapillary glomerulosclerosis associated with a nephrotic type of edema.

There were two patients whose edema was of a nephrotic type compatible with intercapillary glomerulosclerosis. The patient in Case 58953 was a 75 year old white male who presented at the time of admission a low-grade generalized edema with a left pleural effusion. Senile dementia was present; he was emaciated, and had been in diabetic coma twice during the previous year. There was no evidence of cardiac decompensation. There was marked proteinuria, with definite hypoproteinemia; the non-protein-nitrogen was normal. The edema did not disappear after the patient had been on a high protein diet. It was thought clinically that the edema was nutritional in origin but the poor response to an adequate diet suggested that some other factor may have been present. The continued loss of protein in the urine suggested a renal factor, i.e., intercapillary glomerulosclerosis, but in the absence of the morphological evidence in this case, such a diagnosis cannot be made with certainty.

Case 69182 seems to fulfill most of the clinical criteria mentioned in the literature. This 57 year old Negro female was known to be a mild diabetic for 40 months. During the last year of her life she was edematous, excreted large amounts of protein in the urine, developed a hypoalbuminemia and showed progressive renal insufficiency. Her fundi contained many hemorrhages, exudates and severe arteriosclerosis. She was in congestive heart failure, but in no instance was the venous pressure above 18 cm. of saline. The edema disappeared with the administration of digitalis and diuretics, but returned whenever the drug was stopped by the patient. From the clinical data, one might conclude that both cardiac failure and hypoproteinemia played roles in the causation of the edema, although intercapillary glomerulosclerosis cannot be completely excluded.

The diabetes mellitus in a majority of these 10 patients was mild or moderately severe. Nine patients of the group were over 45 years of age. There were insufficient data to establish the relative duration of the diabetes and the hypertension. Marked proteinuria was present in 6 patients; evidence of impaired renal function was found in 4 patients. Hypoproteinemia was noted at times during the course of illness in 8, but in 2 patients the serum protein became normal when cardiac compensation was established. Generalized arteriosclerosis was present in all, though in 2 it was slight in degree.

While it cannot be conclusively stated that all 10 patients did not have intercapillary glomerulosclerosis, the evidence obtained in the two examined at autopsy pointed to a cardiac basis for the clinical features presented by them. From clinical evidence alone, excluding Case 58953 from discussion, one would conclude that edema in the others was probably due to cardiac decompensation. There were, then, in this group of 500 patients, 10 individuals with massive edema which at first glance appeared to be of the nephrotic type; however, the edema improved or disappeared with improvement in the cardiac compensation. In Cases 58953 and 49730 the pathogenesis of the edema remains uncertain.

COMMENT

The literature which we have reviewed shows no clearly defined clinical picture associated with all cases of intercapillary glomerulosclerosis; however, in the most advanced cases there is a tendency to proteinuria and a hypoproteinemia. A relatively small number of these manifest a nephrotic syndrome. In the others the important clinical features are cerebral vascular accidents, cardiac failure, uremia or peripheral vascular arteriosclerosis. The clinical criteria which have been correlated with advanced intercapillary glomerulosclerosis are: (1) the patient is usually over 40 years of age, and more often a female; (2) the diabetes is mild, requiring little or no insulin; (3) varying amounts of protein in the urine; (4) hypoproteinemia is usually found; (5) arteriosclerosis is present; (6) hypertension is frequently found but may be absent; (7) retinal vascular sclerosis is common; (8) varying degrees of renal insufficiency are present; (9) varying degrees of cardiac failure, usually of the left ventricle, are found; (10) in a few, there is evidence of marked generalized edema.

Our 7 patients with the specific lesion in the glomeruli satisfied these criteria, except for the fact that none of them had any edema. Two patients who presented massive edema clinically, at necropsy showed only nephrosclerosis. In 7 other patients the massive edema was due to cardiac failure, since it disappeared with the appropriate cardiac therapy. Finally one patient fitted the clinical criteria for intercapillary glomerulosclerosis with the nephrotic syndrome, but there were other factors which probably contributed to the causation of the edema.

Although proteinuria, arteriosclerosis, hypertension and hypoproteinemia in middle-aged persons with a mild diabetes mellitus may be associated with intercapillary glomerulosclerosis, such features may also occur in persons who fail to show these morphological changes in their kidneys at necropsy. A clinical diagnosis of intercapillary glomerulosclerosis can be proven only in a small minority of such diabetic patients who present a nephrotic type of edema. Many diabetic individuals, who are proven to have intercapillary glomerulosclerosis at autopsy, including some with advanced changes, present no characteristic clinical signs which will differentiate them from diabetic persons without the lesions of intercapillary glomerulosclerosis. The morphological lesion usually has little definite clinical significance.

SUMMARY

1. A study has been made of 500 diabetic patients, for the purpose of evaluating the significance of intercapillary glomerulosclerosis as a factor in the production of edema.

2. Among 42 necropsy examinations, 7 (16.6 per cent) showed histologic evidence of intercapillary glomerulosclerosis. None of these patients had had generalized edema.

3. Eighty patients had dependent edema caused by congestive heart failure.

4. Eleven patients had generalized edema; in 9 of these the edema proved to be of cardiac origin. Of the remaining 2, the edema in 1 was probably nutritional, and in the other, the cause of the edema was not satisfactorily determined.

5. Intercapillary glomerulosclerosis is not commonly an important factor in the formation of edema in diabetics.

REFERENCES

1. Allen, A. C.: So-called Intercapillary Glomerulosclerosis—Lesion Associated with Diabetes Mellitus, Arch. Path. 32:33-51 (July) 1941.

2. Anson, L. J.: Intercapillary Glomerulosclerosis, South. M. J. 31:1272-1275 (Dec.) 1938.

3. Bell, E. T.: Renal Lesions in Diabetes, Am. J. Path. 18:744-745 (July) 1942.

4. Goodof, I. I.: Intercapillary Glomerulosclerosis, Ann. Int. Med. 22:373-381 (March) 1945.

5. Herbut, P. A.: Intercapillary Glomerulosclerosis, Arch. Path. 31:501-507 (April) 1941.

6. Horn, R. C., and Smetana, H.: Intercapillary Glomerulosclerosis, Am. J. Path. 18:93-97 (Jan.) 1942.

7. Joslin, E.: The Treatment of Diabetes Mellitus, ed. 4, Philadelphia, Lea and Febiger, 1928.

8. Kimmelstiel, P.: Glomerular Changes in Arteriosclerotic Contraction of the Kidney, Am. J. Path. 11:483-495 (May) 1935.

9. Kimmelstiel, P., and Wilson, C.: Intercapillary Lesions in the Glomeruli of the Kidney, Am. J. Path. 12:83-97 (Jan.) 1936.

10. Kramer, D. W.: Hypertension and Diabetes, Am. J. M. Sc. 176:23-31 (July) 1928.

11. Laipply, T. C., Eitzen, O., and Dutra, F. R.: Intercapillary Glomerulosclerosis, Arch. Int. Med. 74:354-364 (Nov.) 1944.

12. Newburger, R. A., and Peters, J.: Intercapillary Glomerulosclerosis; A Syndrome of Diabetes, Hypertension and Albuminuria, Arch. Int. Med. 64:1252-1264 (Dec.) 1939.

13. Porter, W. B., and Walker, H.: Clinical Syndrome Associated with Intercapillary Glomerulosclerosis, J. A. M. A. 116: 459-464 (Feb. 8) 1941.

14. Siegal, S., and Allen, A. C.: Intercapillary Glomerulosclerosis (Kimmelstiel-Wilson) and the Nephrotic Syndrome in Diabetes Mellitus, Am. J. M. Sc. 201:516-528 (April) 1941.

15. Volhard, F.: Nieren and Ableitende Harnwege, in von Bergmann, G., and Staehelin, R.: Handbuch der Inneren Medizin. 6:pt. 2, 1051. Berlin, Julius Springer, 1931.

16. Weiss, S.: In discussion on Porter, W. B., and Walker, H.: Clinical Syndrome Associated with Intercapillary Glomerulosclerosis, J. A. M. A. 116:459-464 (Feb. 8) 1941.

GOITER PREVENTION

Vigilance in the prevention of goiter by the use of iodized salt is a problem needing constant vigilance, O. P. Kimball, M. D., Cleveland, declares in the *J. A. M. A.* (Jan. 12, 1946), pointing out that many conclude there is no longer need to use iodized salt since nothing has been heard recently about goiter prevention. Surveys in Michigan and in Cleveland have indicated the value of iodized salt in preventing goiter without ill effect, and Dr. Kimball advocates national use of a natural salt containing 0.01 per cent potassium iodide or its equivalent.

PENICILLIN TREATMENT OF SYPHILIS

Penicillin administered over an eight-day period was effective in curing early syphilis among Army personnel, reports Major William Leifer, M. C., in the Dec. 29, 1945, issue of the *J. A. M. A.* Patients received 60 injections of 20,000 units of penicillin in a salt solution injected into the muscles at three hour intervals.

CYTOLOGICAL STUDY OF NIPPLE SECRETIONS

AN AID IN THE DIAGNOSIS OF BREAST LESIONS

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Any procedure which will assist the physician in his examination of the breast and lead him to a correct diagnosis and proper disposition of the case is worthy of consideration. It is the purpose of this paper to discuss the microscopic study of stained smears made from secretions obtained from the nipple. This study was originally instituted in 1942 by the surgeon author (D. Jackson), who was searching for blood in the nipple secretions. When at times odd looking cells were observed, he decided to call in the pathologist author (A. O. Severance) to interpret these cells. With no experience in this study and without knowledge of earlier papers on this problem the collection of material and its study began.

An inconclusive search of the literature dealing with papillomas of the breast and discharges from the nipple gave meager results. Adair in 1930 in addition to a lengthy discussion of the gross appearance of discharges from the nipple first mentioned the use of the stained smear of nipple secretions as an aid in diagnosis. In papilloma the smears usually showed abundance of red blood cells. In chronic cystic mastitis the smear showed on microscopic examination pus cells, desquamated lining epithelial cells, cell detritus, and crystals. These are not found in cancer. Adair even stated that the question of cancer versus chronic cystic mastitis or papilloma can be settled by the smear. But he did not mention the finding of tumor cells. He reported the majority of the secretions sterile on bacteriological examination. Hicken, Best, and Hunt in 1937 studied nipple discharges using gram stains, and at times saw bacteria, oil droplets, leukocytes, and many degenerating epithelial cells. In 1941 Hinchey advised microscopic examination of nipple discharges to find blood and quoted Greenough as saying this study is of no help in finding malignant cells.

However, Cheatle and Cutler in their book on "Tumors of the Breast" discussed the nipple discharge in detail. They stressed the microscopic examination of the smear, emphasized the care necessary in interpreting epithelial cells, and pointed out that failure to find epithelial cells does not indicate the absence of a tumor. Blood, they considered, is due to papilloma, duct carcinoma, or trauma. Serous discharge may mean carcinoma; it is not common in papilloma. Rarely a diagnosis of carcinoma can be made from microscopic examination of the nipple smear, but it is hazardous and requires special knowledge of the morphology of benign, inflamed, and atypical epithelial cells and of malignant tumor cells. These authors believed thick greenish discharge is of little significance, for these cases seldom come to operation. A whitish discharge may be due to milk, pus, or malignant epithelial cells. They had one such case with carcinoma. They showed photomicrographs of smears made directly from papillomas and carcinomas and also photomicrographs of sections made from these same tumors as a comparison.

For purposes of this study attempts were made gently to express some secretion from the nipples of both breasts from every patient who came with complaints referable to either breast. This material was spread out upon glass slides in the manner of making blood films. These smears were allowed to dry and then stained with Wright's stain as in a blood film.

In studying these smears a record was made of the presence of red blood cells, pus cells, degenerated vacuolated epithelial cells, and dark staining epithelial cells usually in clusters. The technician was trained to identify all of these types of cells. All dark staining epithelial cells were studied by the pathologist.

The criteria used for classifying tumor cells as such are:

1. The cells must be dark staining.
2. The great majority of cells have no vacuoles.
3. The cells must vary in size and shape.
4. The cells must be in clusters of two, three, or more cells.

It is our belief that most of the cells which fit this classification are from papillary cystadenomas or intraductal papillomas. However, on 3 occasions there were very large dark staining cells in clusters which were much larger than usual and which were considered malignant. A carcinoma was found in these 3 cases at operation. On 2 other occasions an opinion of possible malignant tumor cells was given but there was no operation. As time went on the appearance of clusters of dark staining epithelial cells which did not vary much in size or shape and which were in looser, less distinct clusters were interpreted as possible evidence of epithelial hyperplasia instead of a papillary tumor or carcinoma. It appears impossible accurately to separate the dark staining epi-

From the Nix Hospital Clinical Laboratory, San Antonio, Texas.
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thelial cells in clusters into the three groups, that is, epithelial hyperplasia, papillary cystadenoma, and carcinoma.

In experimenting with stains to use on these slides simplicity was deemed essential. The smears of the secretions were made in the physician's office and often after the laboratory workers had departed. They were allowed to dry in air because it was inconvenient to have fixative solutions on hand just for the occasion. It so happened that the end results with Wright's stain were preferred to formalin fixation and hemotoxylin and eosin stain or other more complicated procedures. Other workers have tried and

TABLE 1.—*Breast Secretion Examinations, 1942-July 31, 1945.*

New patients examined	584
Patients re-examined (one or more times)	55
Breasts examined (including rechecks)	1,268
Breasts from which no secretion was obtained	294
Breasts from which secretion was obtained	974
Breast secretions with no tumor cells	843
Breast secretions with tumor cells	131
Breast secretions showing tumor cells; no operation done	80
Breast secretions showing tumor cells; operation done	51
Breast secretions showing tumor cells; papilloma or carcinoma found at operation (74.5%)	38
Breast secretions showing tumor cells; no papilloma or carcinoma found at operation (25.5%)	13

papilloma. As many as twenty blocks of tissue from a portion of breast have been sectioned in cases where no gross lesion was noted.

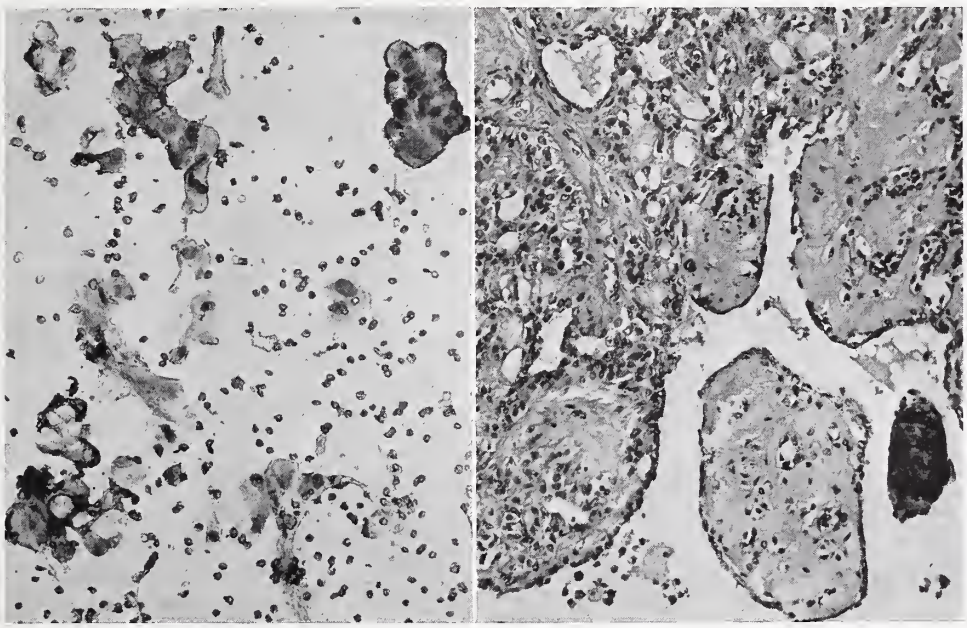

FIG. 1. Papillary cystadenoma of breast. (Left) Tumor cells in clusters and red blood cells in nipple secretion. (Right) The intraductal tumor found at operation. (Note: Both photographs were made at the same magnification. As usual, cells free in the fluid appear larger both because they are not compressed and because they spread out and imbibe fluid.)

will try to improve on the staining technic. Up to the present time Wright's stain has furnished satisfactory detail and only our inexperience with the cytological appearance of the tumor cells in these secretions is a handicap. Again it must be remembered that results are checked at operation and failures may be due not to lack of acquaintance with tumor cells, but to the surgeon's failure to excise the right area or sufficient tissue. Or perhaps the tiny papilloma producing the cells seen in the secretion was missed by the pathologist in the gross inspection and in the taking of blocks from the surgical specimen. Often the slides showed a small intraductal papillary tumor not noticed in the gross examination. For this study numerous blocks were taken, often at random, just in the hope of finding a small

Some of the data collected from 1942 to July 31, 1945 is shown in tables 1, 2, 3, and 4.

While table 1 contains the important findings of the study, tables 2, 3, and 4 contain interesting information brought out by the survey. Rechecks are not included in any of the last three tables. A positive finding occurring once in any number of examinations for any one patient is counted as 1 case.

TABLE 2.—*Breast Secretions Showing Red Blood Cells With and Without Tumor Cells.*

Secretions showing red blood cells and tumor cells	36
No operation	10
Operation; no papilloma found (11.5%)	3
Operation; papilloma found (88.5%)	18
Operation; carcinoma found (88.5%)	5
Secretions showing red blood cells but no tumor cells	30
No operation	23
Operation; no papilloma found	0
Operation; papilloma found	4
Operation; carcinoma found	3

These figures include carcinoma. Each breast is considered a separate case.

A glance at table 3 shows that if one waited for the appearance of blood in the nipple secretion, a papillary tumor would be overlooked quite frequently, 34 times in this series. On the other hand, the papilloma

TABLE 3.—*Nipple Secretion Findings in Breast Tumor Cases.*

Papilloma found at operation	58
No secretion obtained	4
No tumor cells seen in secretions	25
No red blood cells seen in secretions	34
Tumor cells seen in secretions	29
Tumor cells found; later pathological diagnosis: byperplasia	2
Tumor cells found; later pathological diagnosis: adenofibroma	6
Tumor cells found; later pathological diagnosis: chronic cystic mastitis	3
Tumor cells found; later pathological diagnosis: lipoma	1
Tumor cells found; later pathological diagnosis: normal breast	2
Tumor cells found; later pathological diagnosis: carcinoma	9

may be present and tumor cells may not be found in the smears of the nipple secretions, 25 times in this group of cases. Tumor cells were seen in 16 secretions when at operation some benign lesion other than a papilloma was found. Two of these were diagnosed as

TABLE 4.—*Breast Secretion Diagnostic Studies.*

Carcinoma at operation (patients)	33
Breasts examined	60
Breast secretions negative	50
Breast secretions showing tumor cells	9
Breast secretions showing red blood cells	10
Breast secretions showing red blood cells but no tumor cells	3
Breasts showing no secretion	1
Breasts showing tumor cells with carcinoma or papilloma at operation:	
Carcinoma (23.7%)	9
Papilloma (76.3%)	29

epithelial hyperplasia. Cells from this lesion cannot be differentiated from those of papilloma. Occasionally a portion of the papilloma may be squeezed out of the nipple. In those breasts with tumor cells in the secretions the tumor found at operation was in the great majority (76.3 per cent) intraductal papilloma (papillary cystadenoma). Yet the 23.7 per cent for the carcinomas is important. As indicated in table 1, many patients showing tumor cells in their nipple secretions do not come to operation (80 out of 131 cases). Failure to find the expected papilloma at operation was appreciable (25.5 per cent) but not discouraging.

CONCLUSIONS

1. Emphasis has been laid upon the routine attempt gently to obtain nipple secretions for cytological study.

2. The method of preparing smears from the material is discussed.

3. The criteria used in evaluating the epithelial cells seen in the secretion are listed.

4. The statistical data are presented in table form.

5. Again it is stressed that this cytological study of breast secretions is an aid in the diagnosis of breast lesions but by no means should supplant biopsy or other methods of diagnosis.

6. It is felt that some patients received earlier surgical treatment for papillary cystadenoma of the breast than would have been the case were it not for this study of nipple secretions.

7. It is the hope of the authors that the procedure here presented will prevent by early surgical removal some papillary tumors of the breast from slowly changing over to a malignant form.

The authors wish to acknowledge their gratefulness to Dr. Arthur Purdy Stout of New York City for the photomicrograph.

REFERENCES

1. Adair, F.: Sanguineous Discharge from the Nipple and its Significance in Relation to Cancer of the Breast, Study of 108 Cases, Ann. Surg. 91:197-209 (Feb.) 1930.

2. Cheatle, G. L., and Cutler, M.: Tumors of the Breast, Philadelphia, J. B. Lippincott Co., 1931.

3. Dees, J. G., and Schmeisser, H. C.: Intracystic Papilloma and Papillocarcinoma of the Breast, South. M. J. 39:690-696 (July) 1937.

4. Eggers, C., and others: Cancer of the Breast, Ann. Surg. 113:321-340 (March) 1941.

5. Geschickter, C. F.: Mammary Tumors, Surgery 3:916-949 (June) 1938.

6. Hesser, H. H.: Management of the Bleeding Nipple, J. Kansas M. Soc. 45:3-4 (Jan.) 1944.

7. Hicken, N. F., Best, R. R., and Hunt, H. B.: Discharges from the Nipple; Their Clinical Significance and Mammographic Interpretation, Arch. Surg. 35:1079-1094 (Dec.) 1937.

8. Hinchey, P. R.: Nipple Discharge; A Clinicopathologic Study, Ann. Surg. 113:341 (March) 1941.

9. Kaump, D. H., and Mendes, F. A. E.: Papilloma of the Breast; Study of 273 Specimens, Proc. Staff Meet., Mayo Clin. 11:308-309 (May 13) 1936.

10. Lewis, D.: Bleeding Nipples, Surg., Gynec. & Obst. 22: 666 (June) 1916.

11. Saphir, O., and Parker, M. L.: Intracystic Papilloma of the Breast, Am. J. Path. 16:189-210 (March) 1940.

12. Stowers, J. E.: Significance of Bleeding or Discharge from the Nipple, Surg., Gynec. & Obst. 61:537-545 (Oct.) 1935.

13. Treves, N.: The Bleeding Nipple, Trans. & Stud. Coll. Physicians, Philadelphia, 12:68-71 (June) 1944.

INFECTIOUS COLON DISEASES

A new sulfathiazole derivative, phthalylsulfathiazole or sulfathalidine, has been found superior to other drugs in the treatment of infectious diseases of the colon, Michael R. Streicher, M. D., of Chicago, writes in the Dec. 15, 1945, issue of *The Journal of the American Medical Association.*

The author treated 100 patients with this drug, 80 with chronic ulcerative colitis and the others with various infections of the colon. With sulfathalidine treatment, 84 demonstrated good results, 6 fair, and 10 poor reactions. The author believes the drug, taken by mouth, is less poisonous and more effective in arresting the growth of bacteria "than any intestinal agent used previously."

Most of the permanent value of a tuberculosis survey program depends on a thorough follow-up of definite and suspicious cases in regular diagnostic clinics where the history, physical, laboratory, and x-ray findings permit accurate evaluation of the status of the patient's disease.—Rep. Cattaraugus Co. (N. Y.) Health Dept.

COARCTATION OF THE AORTA, PATENT DUCTUS ARTERIOSUS AND INTERVENTRICULAR SEPTAL DEFECT

REPORT OF A CASE

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The clinical history to be reported is of interest because it is the record of a relatively unusual combination of congenital cardiac defects, and because a correct definitive diagnosis was not established prior to autopsy despite study during at least eighteen periods of hospitalization in several institutions. This case is representative of the occasional difficulty encountered in attempting to define clinically the anatomical lesions in congenital cardiac disease, particularly when the lesions are multiple and tend to modify hemodynamic patterns.

CLINICAL RECORD

R. G., an 18-year-old white male unmarried merchant seaman, was admitted to the U. S. Marine Hospital, Galveston, for the first time, on June 13, 1944, complaining primarily of shortness of breath of four days' duration.

The adequacy of the history was limited by the meager intelligence of the patient. The family history was non-contributory except that the patient's mother had died of heart disease of undetermined type at about 40 years of age; the father and three siblings were alive and in good health. The past history was not significant except for measles and a right inguinal hernioplasty in childhood, and a tonsillectomy at the age of 14 years. It was not possible to obtain any information relative to the patient's natal or immediately postnatal period.

The patient stated that his knowledge of heart disease dated from January, 1942, at which time he entered a hospital in Houston because of fever, migratory joint pains, dyspnea, and weakness. He was told that he had rheumatic fever with cardiac and joint involvement, and was treated with digitalis and salicylates with resultant improvement. However, abstracts received from other hospitals indicated that he had been hospitalized at least fifteen times between 1930 (when he was 4 years old) and the time he was admitted to the Marine Hospital at Galveston. At the time the hernioplasty was performed (1930), note was made of an enlarged heart, a thrill at the pulmonic area, and a loud crescendo systolic murmur with maximum intensity at the pulmonic area, but heard over the entire precordium. A diagnosis of congenital heart disease was made, but the anatomical lesions were not defined.

In 1934, he was readmitted to that same institution, at which time the diagnosis of "rheumatic heart disease" was made, the anatomical lesions again not given. Note was also made that he had been treated for pulmonary tuberculosis between 1929 and 1934, but no details were given, and the patient had no knowledge of tuberculosis. During subsequent hospital admissions the diagnosis of rheumatic heart disease was generally made, a systolic murmur was described constantly, and the roentgenologic appearance of the heart was usually described as being of "mitral configuration." Since 1942, the patient had been hospitalized on four occasions in different institutions for treatment of congestive heart failure, apparently precipitated in each instance by a respiratory infection. Digitalis controlled the symptoms on each occasion but the patient would discontinue the maintenance dose on his own initiative with consequent relapse.

The first admission to the Marine Hospital, on June 13, 1944, was motivated by a recurrence of dyspnea and weakness of four days' duration, associated with dull aching pains in both knees radiating to the calves of the legs, and similar pain in the left elbow radiating down the forearm. These difficulties developed ten days after he had ceased taking his maintenance dose of digitalis. He had had no recent edema and did not complain of precordial pain, cough, hemoptysis, fever, or syncopal episodes. Symptomatic system review failed to reveal any significant features other than occasional difficulty in starting the urinary stream, and small size of the stream, which had been present since childhood.

Physical examination revealed a young white male, mildly dyspneic even at rest, but otherwise in no apparent distress, of fairly good muscular development, weighing 135 pounds and 67 inches tall. The facies were mongoloid in appearance with high cheekbones and slanting eyes. The pupils were of equal size, round, regular, and reacted to light and in accommodation. The fundi were normal. The ears, nose, and throat were normal except that the arch of the palate was high and exaggerated. The thyroid was not enlarged, nor was there any abnormal lymphadenopathy. Slight dilatation of the veins of the neck was evident both in the erect posture and in recumbency, but they did not fill from below. The lungs were normal to physical examination.

The cardiac thrust was readily visible on the anterior thoracic wall, and the heart was enlarged to the left, with the point of maximum intensity in the sixth intercostal space at the left anterior axillary line. No thrills were palpable, but there was a distinct diastolic *shock* in the second and third interspaces immediately to the left of the sternum. The heart sounds were of good quality, with great accentuation of the pulmonic second sound. A loud, harsh, blowing, systolic murmur was audible over the entire precordium and was maximal in the second and third left intercostal spaces immediately to the left of the sternum. No murmurs were audible on the posterior aspect of the thorax nor were any abnormal pulsations felt there. The cardiac rhythm was regular, with a rate of ninety-two beats per minute. The blood pressure was 118 systolic, 72 diastolic. The blood pressure in the lower extremities unfortunately was not measured.

Examination of the abdomen revealed no visceromegaly or tenderness. There was a right inguinal hernioplasty scar, and both inguinal rings were slightly enlarged. A slight degree of hypospadias was present but the genitalia were otherwise normal. Rectal examination was negative. The extremities exhibited no acral clubbing, cyanosis, edema, or other abnormalities. Neurological examination was normal, but the patient was of very low intellectual caliber, uncoöperative, noisy, and distressingly obscene in conversation and behavior. His mental status was that of a high grade moron.

Urinalysis was not remarkable. The blood Kahn test was negative. The red cells numbered 4.73 million per cu. mm., with 13.1 Gm. of hemoglobin. The white cell count was 4,650 per cu. mm. with 47 per cent neutrophiles, 52 per cent lymphocytes and 1 per cent eosinophiles. The sedimentation rate was within upper normal limits. A roentgenogram of the

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chest (Fig. 1) revealed pronounced cardiac enlargement, with straightening of the left border and bulging in the region of the pulmonic conus; these features were interpreted by the roentgenologist as indicating the presence of advanced mitral disease. In view of the normal blood pressure and the absence of abnormal posterior thoracic pulsations, insufficient diagnostic significance was attached to the erosion of the rib margins evident in the chest roentgenogram and occurring so characteristically in coarctation of the aorta.[11]

The electrocardiogram showed inversion of the T waves in all limb leads and lead C_4F, and notching and/or slurring of the QRS complexes in all leads. There was regular sinus rhythm with a rate of 75

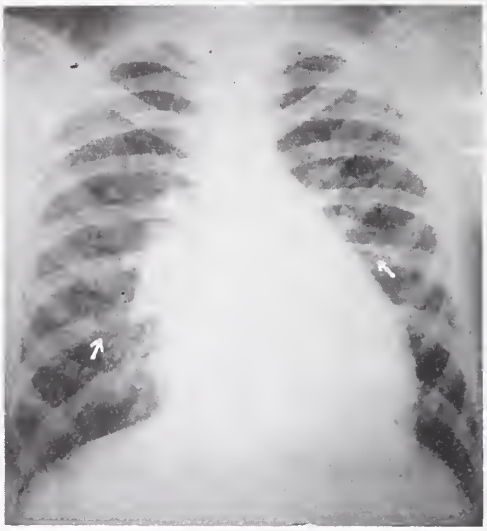

FIG. 1. Roentgenogram indicating cardiac enlargement, bulging in the region of the conus, and erosion of the rib margins.

beats per minute, a P-R interval of 0.19 second, and a QRS duration of 0.08 second.

Our diagnosis was congenital heart disease of undetermined type with enlarged heart, regular sinus rhythm, cardiac insufficiency class IV D, and mild mongolianism. Treatment consisted of rest, digitalization, and symptomatic measures, with resultant relief of dyspnea and other complaints. He was discharged on June 29, 1944, with advice to continue on a maintenance dose of one cat unit of digitalis daily.

On July 24, 1944, the patient was admitted to another hospital because of the recurrence of dyspnea and pains in the knees; he had again voluntarily discontinued the digitalis. At that hospital the physical examination was essentially as described above. The blood pressure was recorded as 115 systolic, 65 diastolic. There was no evidence of arthritis. Cardiac fluoroscopy, teleoroentgenogram, and esophagram were reported as showing "advanced mitral heart disease with marked globularity and some enlargement of the heart and marked posterior enlargement of the auricle." The electrocardiographic report was as follows: "Borderline A-V conduction time. Definite electrocardiographic evidence of myocardial damage. Probable active myocarditis." The sedimentation rate was 23 mm. A diagnosis of "active rheumatic myocarditis with cardiac failure" was made and the patient was treated with sodium salicylate, 10 Gm. daily. Digitalis was not prescribed. Because of the patient's poor conduct and his eligibility for admission as a merchant seaman, he was transferred to the U. S. Marine Hospital on August 8, 1944.

On this second admission, the patient was in severe distress with dyspnea and orthopnea. There was moderate cyanosis and disorientation. Moderate (two plus) edema of the legs, feet, hands, and face was evident, and a few fine moist basal rales were audible at both pulmonary bases. The liver edge was palpable 2 cm. below the right costal margin in the midclavicular line. The cardiac and other physical findings were as described on his previous admission. Urinalysis revealed a few hyaline casts and white cells per high power field, and slight albuminuria. The red cell count was 3.21 million per cu. mm. with 6.2 Gm. hemoglobin per 100 cc. The white cell count was 8,000 per cu. mm. with 87 per cent neutrophiles, 10 per cent lymphocytes, 2 per cent monocytes, and 1 per cent eosinophiles. The sedimentation rate was moderately elevated. The blood urea nitrogen was 28 mg. per 100 cc.

Treatment consisted of digitalis by mouth and parentally, diuretics, salt restriction, and oxygen, but the temperature rose gradually to 39.6 C., coma developed, and the patient died on August 11, 1944.

At postmortem examination the pericardial cavity was found to contain 200 cc. of serous fluid. The

FIG. 2. The probe emerges from the aortic orifice of the ductus arteriosus. The hypertrophy of the left ventricle, the site of coarctation, and the intimal fold guarding the aortic orifice are evident.

heart was tremendously enlarged, globular in shape, and weighed 840 Gm. The right ventricular wall was 1.2 cm. thick and the left measured 2 cm. The valve circumferences were as follows: tricuspid, 13.5 cm.; pulmonary, 8 cm.; mitral, 10 cm.; aortic, 4.5 cm. In the membranous portion of the interventricular septum, there was a perforation 0.5 cm. in diameter. Multiple minute, firm, nodular verrucous excrescences were present on the free margins of the leaflets of the mitral valve. The other valves were normal, except for fenestration of the posterior aortic cusp. The right coronary artery had two ostia.

The ductus arteriosus was patent, and the lumen was 2 mm. in diameter. The ductus was 1 cm. long and 0.5 cm. in diameter, and its opening into the aorta was guarded by a small transverse intimal fold. The aorta was greatly constricted at the site

of insertion of the ductus arteriosus, and the diameter of the lumen at the point of constriction was about 3 mm. The aortic wall was thin, but elastic. The abdominal aorta measured only 5 cm. in circumference. The collateral circulation was not studied in detail, but it was noted that the intercostal arteries were enlarged and tortuous, and the internal mammary arteries were dilated.

Microscopic examination of the heart revealed capillary distention, and petechial extravasations of blood in the epicardium. The muscle fibers were large, and there seemed to be a slight increase in connective tissue. No Aschoff bodies were found. The nodules on the mitral leaflets were composed of cellular fibrous tissue, with intensely basophilic amorphous material in the center portions. Sections of the aorta were not remarkable except for hypoplasia.

Each pleural cavity contained about 300 cc. of serous fluid, and the lungs exhibited well-marked passive congestion and edema. The peritoneal cavity contained about 400 cc. of serous fluid. The urachus (ligamentum umbilicale medium), the fetal umbilical vein, and hypogastric arteries were very prominent, but were not patent on section.

The liver weighed 1,549 Gm. and exhibited the characteristic features of chronic passive congestion, as did the spleen, which weighed 453 Gm. The gastro-intestinal and genito-urinary tracts were not remarkable except for congestive changes, and the hypospadias noted on physical examination. The thymus revealed a relatively small amount of lymphoid and fatty tissues, but contained extremely large Hassall's corpuscles which exhibited advanced degenerative changes. The thyroid follicles were very large and well filled with colloid; the epithelium lining the acini was of low cuboidal type. Postmortem examination was otherwise not remarkable.

COMMENT

The coexistence of patent ductus arteriosus and coarctation of the aorta is a relatively common finding. Abbott[1] found 18 instances of this combination in 200 collected cases of coarctation in adults, and 7 instances in 9 cases of coarctation of the so-called "infantile" type.[2] Since the publication of Abbott's series, Evans[7] has reported 28 cases of coarctation, of which 17 also exhibited patency of the ductus arteriosus. Ulrich[13] reported 3 cases of coarctation, in one of which the ductus was patent. Thus, of this total of 240 cases of coarctation, 43 or 18 per cent had a patent ductus arteriosus. Black[4] reported a single similar case in a young man who died of a ruptured aorta, and Graham and Kerr[10] described a young woman in whom they postulated the coexistence of coarctation, patent ductus, and septal defect on the basis of clinical findings.

In 1903, Bonnet[6] recommended the differentiation of coarctation of the aorta into (a) the *infantile type,* with diffuse narrowing of the aortic isthmus, attributed by him to embryonal failure of development of the branchial arch corresponding to the isthmus of the aorta, and frequently associated with other grave cardiac defects, and (b) the *adult type,* with sharp constriction near the insertion of the ductus arteriosus, which he attributed to postnatal aberrations probably related somehow to the mechanism responsible for closure of the ductus arteriosus. Despite the inadequacy of Bonnet's classification, and its dependence upon two theories of pathogenesis to explain essentially similar lesions, it has persisted through the years. Evans[7] offered a more satisfactory classification in 1935, based upon the location and the extent of the

FIG. 3. Demonstrating the opening of the ductus into the pulmonary artery.

aortic constriction, the condition of the proximal aorta, and the state of the ductus arteriosus, namely:

Type I.—Congenital stenosis of aortic arch, with ductus arteriosus patent, and hypoplasia of the proximal portion of the aorta. (The patient under consideration would fall into this class.)

Type II.—Congenital stenosis of aortic arch, with ductus arteriosus closed, and hypertrophy of the proximal portion of the aorta.

Type III.—Congenital atresia of distal portion of aortic arch, with ductus arteriosus closed, and hypertrophy of the proximal portion of the aorta.

Type IV.—Interruption of aortic arch in its distal portion, with ductus arteriosus patent and hypoplasia of the proximal portion of the aorta.

Type V.—Congenital atresia of the proximal portion of aortic arch, with ductus arteriosus patent.

Type VI.—Congenital absence of the ascending aorta, with ductus arteriosus patent.

It is apparent that this classification makes no attempt to incorporate unproved and poorly understood etiologic data, and, were the site of constriction defined by the terms *supraductal, juxtraductal,* and *infraductal,* it would be a satisfactory anatomic and descriptive classification; however, it is somewhat unwieldy.

In the same report, Evans summarized the evidence supporting the concept that coarctation is the result of embryonal maldevelopment, as opposed to the *skodaic* theory, which suggested that the constriction of the aorta resulted from the extension into the aortic wall of the constrictive process which was

responsible for the closure of the ductus arteriosus. The case recorded here, presenting, as it does, other congenital anomalies (hypospadias and slight mongolianism) associated with the cardiovascular aberrations, is further proof of the theory that coarctation is of developmental origin.

Friedberg[8] has recently postulated a theory of pathogenesis of coarctation, which attempts to relate the so-called adult type to the closure of the ductus arteriosus by changes occurring at the time when the ductus closes. An essential part of his theory is that closure of the ductus arteriosus is a "necessary prerequisite and cause" of the adult type of coarctation; however, a case such as the one presented here would militate strongly against such a conception, because this case represents what has been considered the adult type of coarctation, and yet the ductus arteriosus remained patent.

TABLE 1.—*Blood Pressure at Intervals Throughout the Life of the Patient Whose History Is Reported.*

Date	Age (Years)	Systolic	Diastolic
July, 1935	9	140	80
Jan., 1941	15	130	84
Jan. 9, 1943	17	124	90
Jan. 29, 1943	17	140	80
July, 1943	17	136	40
April, 1944	18	120	40
June, 1944	18	118	72
July, 1944	18	115	65

The persistent patency of the ductus in this case could best be explained by the increased pressure in the right ventricle resulting from the interventricular septal defect. Such a mechanistic conception, although teleologically satisfactory, remains merely a supposition because understanding of the processes responsible for congenital cardiovascular aberrations is as yet very scant.

Consideration of the etiology of the hypertension exhibited by the vast majority of patients with coarctation of the aorta is beyond the scope of this report and would be repetitious, since comprehensive reviews are available.[5, 9, 12] However, the blood pressures (Table 1) recorded at intervals throughout the life of the patient whose history is reported here are worthy of note. It is evident that systolic hypertension was present when the patient was 9 years old, but the levels of the systolic blood pressure from the age of 15 years were within normal ranges. Whether the hypertension abated as a result of the development of collateral channels which decreased peripheral resistance or as a result of increasing myocardial strain with reduction in the cardiac output is a matter of conjecture. The low diastolic pressure is not uncommon in patency of the ductus arteriosus because the hemodynamic features of the defect resemble those present in aortic insufficiency.

The small verruca-like fibrous nodules described on the mitral valve of the case recorded here are of uncertain cause and significance. Allen and Sirota[3] recently reviewed the pathologic features of valvular nodules which they have described as degenerative verrucal endocardiosis. They classified the nodules histologically as exudative, degenerative, or healed, and the nodules in this case would correspond to the healed variety. Rheumatic valvulitis is only one of the mechanisms which may lead to nodule formation, and it is by no means certain that this patient ever did have rheumatic fever.

SUMMARY

1. The clinical history and autopsy findings of a patient with coarctation of the aorta, patent ductus arteriosus, and interventricular septal defect are reported.

2. The most striking feature was the failure of observers (including the authors) to establish a definite diagnosis despite eighteen periods of hospitalization in different institutions.

REFERENCES

1. Abbott, M. E.: A Statistical Study and Historical Retrospect of Two Hundred Recorded Cases, with Autopsy, of Stenosis or Obliteration of the Descending Arch in Subjects Above the Age of Two Years, Am. Heart J. 3:574-618 (June) 1928.

2. Abbott, M. E.: Atlas of Congenital Cardiac Disease, New York, American Heart Association, 1936.

3. Allen, A. C., and Sirota, J. H.: The Morphogenesis and Significance of Degenerative Verrucal Endocardiosis, Am. J. Path. 20:1025-1055 (Nov.) 1944.

4. Black, R. C.: Ruptured Aorta, Coarctation of the Aorta and Patent Ductus Arteriosus in a Man, Aged Twenty-one Years, M. J. Australia 2:178 (Aug. 29) 1942.

5. Blumgart, H. L., Lawrence, J. S., and Ernestene, A. C.: The Dynamics of the Circulation in Coarctation (Stenosis of the Isthmus) of the Aorta of the Adult Type, Arch. Int. Med. 47: 806-823 (May) 1931.

6. Bonnet, L. M.: Sur la Lesion Dite Stenose Congenitale de l'Aorta dans la Region de l'Isthme, Rev. de Med. 108:255; 335; 418, 1903.

7. Evans, W.: Congenital Stenosis (Coarctation), Atresia, and Interruption of the Aortic Arch, Quart. J. Med. 2:1-31 (Jan.) 1933.

8. Friedberg, C. K.: Coarctation of the Aorta—A New Theory as to Its Pathogenesis, J. Mt. Sinai Hosp. 8:520-533 (Jan.-Feb.) 1942.

9. Friedman, M., Selzer, A., and Rosenblum, H.: The Renal Blood Flow in Coarctation of the Aorta, J. Clin. Investigation 20: 107-111 (March) 1941.

10. Graham, J. G., and Kerr, J. D. O.: Coarctation of the Aorta with Patent Ductus Arteriosus, Brit. Heart J. 3:121-126 (April) 1941.

11. Railsback, O. C., and Dock, W.: Erosion of the Ribs Due to Stenosis of the Isthmus (Coarctation) of the Aorta, Radiology 12:58-61 (Jan.) 1929.

12. Steele, J. M.: Evidence for General Distribution of Peripheral Resistance in Coarctation of the Aorta; Report of Three Cases, J. Clin. Investigation 20:473-480 (Sept.) 1941.

13. Ulrich, H. L.: Coarctation of the Aorta (Adult Type): A Report of Three Cases, Am. Heart J. 7:641-651 (June) 1932.

TYPHUS, TYPHOID, AND MALARIA THREATEN EUROPE

Typhus in the east, typhoid in both west and east, and malaria in the Mediterranean area are among the principal communicable diseases threatening the present health of Europe, according to a summary of the epidemic situation on that continent made public by UNRRA in an Epidemiological Information Bulletin. Tuberculosis, diphtheria, and syphilis are generally prevalent. Dysentery has been reported on the increase in a number of areas including Great Britain, and outbreaks of polio have been noted in Belgium and Czechoslovakia.

CAUSES OF ECONOMIC BLINDNESS IN TEXAS

A Statistical Survey of 6,106 Cases, Aid to the Blind Program, Texas State Department of Public Welfare

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The results of a statistical survey will of necessity prove to be dry reading to many; however, it is felt that the importance of the subject matter is such as to vindicate the act. To my knowledge, this report is the first of its nature ever attempted in Texas, as heretofore no investigator has had available the statistical data necessary for such a study.

I am cognizant of the fact that such a report as here submitted will, to some at least, lose part of its value by the general nature of its coverage; however, a more detailed report in one paper would prove too voluminous. I hope at a later date to report more in detail on the various phases of the statistics available now and later. Such information as may be desired and not contained in this report concerning any phase of economic blindness in Texas will be gladly furnished by the Department of Public Welfare upon request.

Undoubtedly a close study of the report and the tables of figures contained in it will raise questions of accuracy of at least a few of the statements made or figures submitted. To forestall at least some of this criticism, I would call to your attention a few of the more pertinent general factors which could not be eliminated:

1. The statistics used are gathered from reports of eye examinations as made by many physicians throughout the State of Texas. Especially during the past few years, the time which is primarily covered in this report, it has not been possible to have all applicants examined by oculists of good repute, this being of course due to the shortage of oculists for civilian practice during the war. As a consequence, some of the diagnoses made are no doubt questionable.

2. This report covers only *indigent*, economically blind persons over 21 years of age.

3. Economic blindness* as defined in the Public Welfare Act of 1941 of the Forty-seventh Legislature is vision which, with correctional glasses, is insufficient for use in an occupation for which sight is essential. Economic blindness as used in collecting the data for this study is defined in terms of ophthalmic measurement as central visual acuity of 20/200 or less in the better eye with correcting glasses or a field defect in which the peripheral field has contracted to such an extent that the widest diameter of

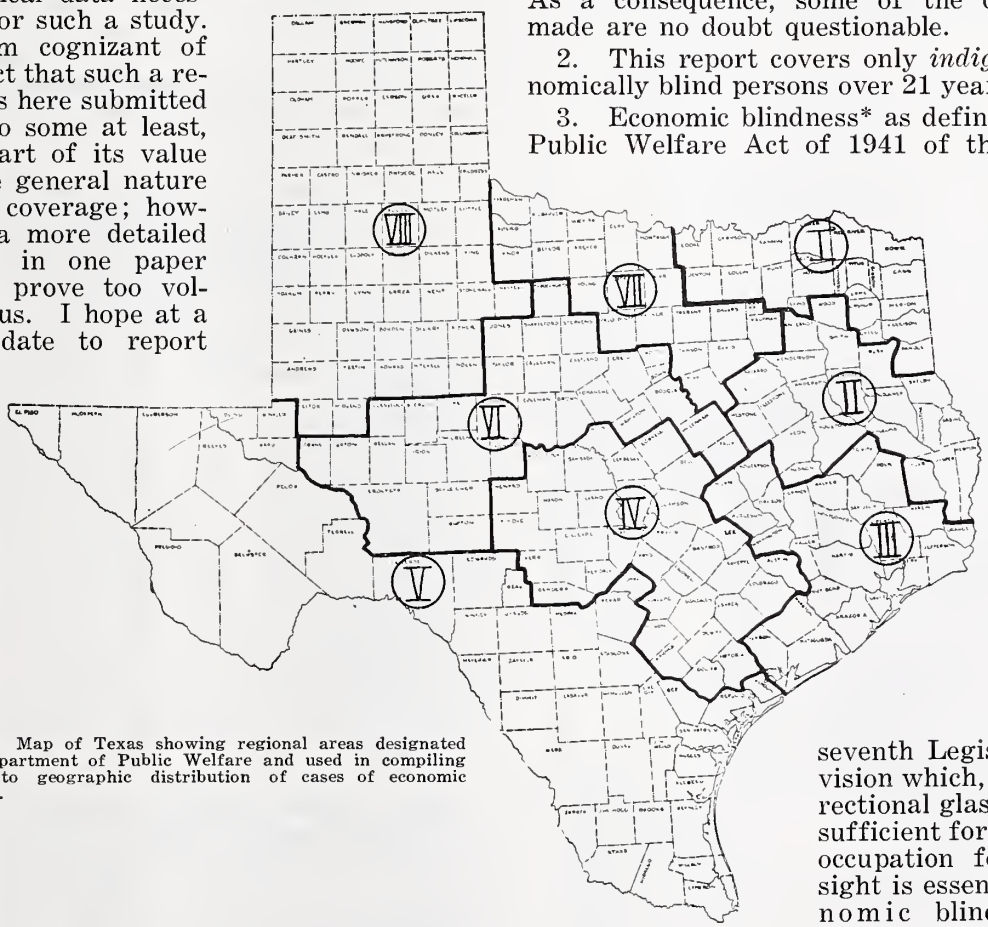

FIG. 1. Map of Texas showing regional areas designated State Department of Public Welfare and used in compiling data as to geographic distribution of cases of economic blindness.

Prepared for reading before the Section on Eye, Ear, Nose and Throat, Annual Session, State Medical Association of Texas, Galveston, May 8-10, 1945, cancelled because of war conditions.

*AUTHOR'S NOTE.—Effective June 8, 1945, the definition of economic blindness as used by the Texas State Department of Public Welfare in terms of ophthalmic measurement is central visual acuity of 20/200 in the better eye with correcting lenses. A peripheral field loss in which the visual field efficiency is reduced to 30 per cent or less may be considered equally disabling, as may certain ocular conditions which do not necessarily involve visual acuity or peripheral field loss but which constitute severe visual handicaps.

TABLE 1.—*Individuals Approved for Aid to the Blind, Classified by Race and Sex.*

Race	Number by Sex		
	Total	Male	Female
Total	6,106	3,699	2,407
Anglo-American	3,896	2,370	1,526
Negro-American	2,019	1,204	815
Latin-American	191	125	66

TABLE 2.—*Percentage of Individuals Approved for Aid to the Blind, Classified by Race and Sex.*

Race	Per Cent of Total		
	Total	Male	Female
Total	100.0	60.6	39.4
Anglo-American	63.8	38.8	25.0
Negro-American	33.1	19.8	13.3
Latin-American	3.1	2.0	1.1

TABLE 3.—*Individuals Approved for Aid to the Blind, Classified by Age at Time of Approval.*

Age in Years	Number	Per Cent
Total	6,106	100.0
21-24	116	1.9
25-29	236	3.9
30-34	298	4.9
35-39	349	5.7
40-44	473	7.8
45-49	530	8.7
50-54	584	9.6
55-59	751	12.3
60-64	1,064	17.4
65-69	865	14.2
70-74	277	4.5
75-79	218	3.6
80-84	133	2.2
85-89	75	1.2
90-94	25	0.4
95-99	3	<0.1
100 and over	9	0.1
Over 21, exact age unknown	100	1.6

TABLE 4.—*Individuals Approved for Aid to the Blind, Classified by Race and by Cause of Blindness by Site (Topography) and Type of Affection.*

Site and Type of Affection	Number by Race			
	Total	Anglo-American	Negro-American	Latin-American
Total	6,106	3,896	2,019	191
Eyeball in general	1,501	818	621	62
Hypertension (glaucoma)	803	399	377	27
Refractive errors	118	71	41	6
Panophthalmitis and acute endophthalmitis	26	15	10	1
Structural anomalies	127	76	44	7
Degenerative changes	427	257	149	21
Cornea	785	574	198	13
Iris and ciliary body	255	134	116	5
Sympathetic ophthalmitis	103	60	41	2
Other affections of the iris and ciliary body	152	74	75	3
Crystalline lens	1,668	1,165	441	62
Choroid and retina	573	444	118	11
Optic nerve, visual pathway, and cortical visual centers	1,145	611	501	33
Retrobulbar and intracranial lesions	32	17	14	1
Other affections	1,113	594	487	32
Vitreous (excluding sequellae of known ocular origin	1	1	0	0
Miscellaneous and ill-defined	178	149	24	5
Amblyopia, undefined	106	89	14	3
Other	72	60	10	2

the visual field subtends at an angular distance of not greater than 20 degrees.

4. The Standard Classification of Causes of Blindness as compiled by The Committee on Statistics of the Blind has been used. As federal aid on this aid to the blind program is received, it is necessary to employ the same classification used by the U. S. Social Security Board.

With these preliminary remarks, some of the more pertinent conclusions rather than a lengthy discussion, are offered.

SPECIFIC CONCLUSIONS

1. It appears significant and worthy of note that Regions 1, 2, 3, and 7 (as shown by tables 7, 11, 14, and 17) furnish the bulk of applicants for aid to the blind. In seeking the answer as to why this is true, it can be noted that these regions are composed of counties of our state which border upon other states or are in close proximity thereto. Is this a pertinent factor? Are eye patients of these regions less able to secure adequate medical attention than those of other regions? Is the standard of living lower in these regions? These and other factors should be more thoroughly investigated and no doubt will be in the near future. (See regional map, Fig. 1.)

2. Reference to tables 1 and 2 leads to the conclusion that economic blindness in all races is more prevalent in males in so far as sex is concerned.

TABLE 5.—*Percentage of Individuals Approved for Aid to the Blind, Classified by Race and by Cause of Blindness by Site (Topography) and Type of Affection.*

Site and Type of Affection	Per Cent of Total			
	Total	Anglo-American	Negro-American	Latin-American
Total	100.0	63.8	33.1	3.1
Eyeball in general	24.6	13.4	10.2	1.0
Hypertension (glaucoma)	13.2	6.5	6.2	0.5
Refractive errors	1.9	1.1	0.7	0.1
Panophthalmitis and acute endophthalmitis	0.4	0.2	0.2	<0.1
Structural anomalies	2.1	1.3	0.7	0.1
Degenerative changes	7.0	4.3	2.4	0.3
Cornea	12.9	9.4	3.3	0.2
Iris and ciliary body	4.2	2.2	1.9	0.1
Sympathetic ophthalmitis	1.7	1.0	0.7	<0.1
Other affections of the iris and ciliary body	2.5	1.2	1.2	0.1
Crystalline lens	27.3	19.1	7.2	1.0
Choroid and retina	9.4	7.3	1.9	0.2
Optic nerve, visual pathway, and cortical visual centers	18.7	10.0	8.2	0.5
Retrobulbar and intracranial lesions	0.5	0.3	0.2	<0.1
Other affections	18.2	9.7	8.0	0.5
Vitreous (excluding sequellae of known ocular origin	0.1	0.1	0.0	0.0
Miscellaneous and ill-defined	2.9	2.4	0.4	0.1
Amblyopia, undefined	1.7	1.4	0.2	0.1
Other	1.2	1.0	0.2	<0.1

TABLE 6.—*Individuals Approved for Aid to the Blind, Classified by Sex and by Cause of Blindness by Site (Topography) and Type of Affection.*

Site and Type of Affection	Number by Sex		
	Total	Male	Female
Total	6,106	3,699	2,407
Eyeball in general	1,501	837	664
Hypertension (glaucoma)	803	418	385
Refractive errors	118	69	49
Panophthalmitis and acute endophthalmitis	26	16	10
Structural anomalies	127	64	63
Degenerative changes	427	270	157
Cornea	785	472	313
Iris and ciliary body	255	185	70
Sympathetic ophthalmitis	103	90	13
Other affections of the iris and ciliary body	152	95	57
Crystalline lens	1,668	975	693
Choroid and retina	573	347	226
Optic nerve, visual pathway, and cortical visual centers	1,145	779	366
Retrobulbar and intra-cranial lesions	32	23	9
Other affections	1,113	756	357
Vitreous (excluding sequellae of known ocular origin)	1	0	1
Miscellaneous and ill-defined	178	104	74
Amblyopia, undefined	106	55	51
Other	72	49	23

TABLE 7.—*Individuals Approved for Aid to the Blind, Classified by Region and by Cause of Blindness by Site (Topography) and Type of Affection.*

Site and Type of Affection	Total	Number by Region I	II	III	IV	V	VI	VII	VIII
Total	6,106	984	985	1,102	621	497	498	1,158	261
Eyeball in general	1,501	206	215	340	150	130	124	283	53
Hypertension (glaucoma)	803	95	90	191	86	76	75	160	30
Refractive errors	118	24	32	17	6	7	9	16	7
Panophthalmitis and acute endophthalmitis	26	7	1	3	3	3	2	6	1
Structural anomalies	127	21	22	26	16	11	7	19	5
Degenerative changes	427	59	70	103	39	33	31	82	10
Cornea	785	135	127	115	90	54	66	157	41
Iris and ciliary body	255	42	39	59	30	16	15	45	9
Sympathetic ophthalmitis	103	30	9	15	15	4	8	20	2
Other affections of the iris and ciliary body	152	12	30	44	15	12	7	25	7
Crystalline lens	1,668	268	282	263	183	150	150	300	72
Choroid and retina	573	114	115	78	54	37	46	100	29
Optic nerve, visual pathway, and cortical visual centers	1,145	186	172	228	95	99	81	232	52
Retrobulbar and intracranial lesions	32	9	5	1	3	2	2	7	3
Other affections	1,113	177	167	227	92	97	79	225	49
Vitreous (excluding sequellae of known ocular origin)	1	0	1	0	0	0	0	0	0
Miscellaneous and ill-defined	178	33	34	19	19	11	16	41	5
Amblyopia, undefined	106	24	20	6	16	4	9	24	3
Other	72	9	14	13	3	7	7	17	2

TABLE 8.—*Individuals Approved for Aid to the Blind, Classified by Race and Cause of Blindness by Etiology.*

Etiology	Total	Number by Race Anglo-American	Negro-American	Latin-American
Total	6,106	3,896	2,019	191
Infectious diseases	1,016	568	416	32
Gonorrhea, excluding gonorrheal ophthalmia neonatorum	29	7	18	4
Ophthalmia neonatorum	135	70	60	5
Syphilis	411	101	295	15
Trachoma	316	305	13	0
All other infectious diseases	125	87	30	8
Trauma (including chemical burns)	422	257	153	12
Nonoccupational activities	104	57	45	2
Occupational activities	51	36	15	0
Activities, not specified	267	164	93	10
Poisonings	16	9	7	0
Neoplasms	30	26	4	0
General diseases	236	190	45	1
Prenatal origin (not elsewhere classified)	22	16	5	1
Etiology undetermined or not specified	4,364	2,830	1,389	145
Unknown to science	2,884	1,896	891	97
Undetermined by physician	623	381	212	30
Not specified	857	553	286	18

3. As would be expected, economic blindness is most prevalent among the middle-aged, reaching a peak among persons about 60 years of age (Table 3).

4. Reference to tables 4, 5, and 6 makes it apparent that according to topography of the lesion causing economic blindness, the most frequent sites are the lens (27.3 per cent), the eyeball in general (24.6 per cent), and the optic nerve tract (18.7 per cent), in the order mentioned.

Lenticular lesions are, as to be expected, senile cataracts in the vast majority of instances.

In affections of the eyeball in general, more than half of the 24.6 per cent of applicants in this category have affections due to hypertension (glaucoma of various types).

TABLE 9.—*Percentage of Individuals Approved for Aid to the Blind, Classified by Race and Cause of Blindness by Etiology.*

Etiology	Per Cent of Total Total	Anglo-American	Negro-American	Latin-American
Total	100.0	63.8	33.1	3.1
Infectious diseases	16.6	9.3	6.8	0.5
Gonorrhea, excluding gonorrheal ophthalmia neonatorum	0.5	0.1	0.3	0.1
Ophthalmia neonatorum	2.2	1.1	1.0	0.1
Syphilis	6.7	1.7	4.8	0.2
Trachoma	5.2	5.0	0.2	0.0
All other infectious diseases	2.0	1.4	0.5	0.1
Trauma (including chemical burns)	6.9	4.2	2.5	0.2
Nonoccupational activities	1.7	0.9	0.8	<0.1
Occupational activities	0.8	0.6	0.2	0.0
Activities, not specified	4.4	2.7	1.5	0.2
Poisonings	0.2	0.1	0.1	0.0
Neoplasms	0.5	0.4	0.1	0.0
General diseases	3.9	3.1	0.8	<0.1
Prenatal origin (not elsewhere classified)	0.4	0.3	0.1	<0.1
Etiology undetermined or not specified	71.5	46.3	22.8	2.4
Unknown to science	47.2	31.0	14.6	1.6
Undetermined by physician	10.2	6.2	3.5	0.5
Not specified	14.1	9.1	4.7	0.3

TABLE 10.—*Individuals Approved for Aid to the Blind, Classified by Sex and Cause of Blindness by Etiology.*

Etiology	Number by Sex Total	Male	Female
Total	6,106	3,699	2,407
Infectious diseases	1,016	628	388
Gonorrhea, excluding gonorrheal ophthalmia neonatorum	29	18	11
Ophthalmia neonatorum	135	68	67
Syphilis	411	293	118
Trachoma	316	185	131
All other infectious diseases	125	64	61
Trauma (including chemical burns)	422	370	52
Nonoccupational activities	104	87	17
Occupational activities	51	49	2
Activities, not specified	267	234	33
Poisonings	16	14	2
Neoplasms	30	15	15
General diseases	236	133	103
Prenatal origin (not elsewhere classified)	22	14	8
Etiology undetermined or not specified	4,364	2,525	1,839
Unknown to science	2,884	1,613	1,271
Undetermined by physician	623	401	222
Not specified	857	511	346

TABLE 11.—*Individuals Approved for Aid to the Blind, Classified by Region and Cause of Blindness by Etiology.*

Etiology	Total	Number by Region I	II	III	IV	V	VI	VII	VIII
Total	6,106	984	985	1,102	621	497	498	1,158	261
Infectious diseases	1,016	164	145	201	79	63	78	246	40
Gonorrhea, excluding gonorrheal ophthalmia neonatorum	29	1	8	7	2	3	0	7	1
Ophthalmia neonatorum	135	14	22	31	18	8	7	32	3
Syphilis	411	45	50	132	14	29	21	111	9
Trachoma	316	80	46	15	29	12	42	70	22
All other infectious diseases	125	24	19	16	16	11	8	26	5
Trauma (including chemical burns)	422	75	49	78	48	35	28	86	23
Nonoccupational activities	104	14	11	14	12	16	9	24	4
Occupational activities	51	10	3	11	6	3	3	8	7
Activities, not specified	267	51	35	53	30	16	16	54	12
Poisonings	16	4	1	1	2	1	2	4	1
Neoplasms	30	4	6	5	4	2	2	3	4
General diseases	236	43	42	34	21	13	18	48	17
Prenatal origin (not elsewhere classified)	22	2	4	3	4	7	0	2	0
Etiology undetermined or not specified	4,364	692	738	780	463	376	370	769	176
Unknown to science	2,884	444	456	518	317	249	260	523	117
Undetermined by physician	623	119	81	88	89	75	58	90	23
Not specified	857	129	201	174	57	52	52	156	36

TABLE 12.—*Individuals Approved for Aid to the Blind, Classified by Race and Extent of Vision.*

Extent of Vision	Per Cent of Total	Number by Race: Total	Anglo-American	Negro-American	Latin-American
Total	100	6,106	3,896	2,019	191
Absolute blindness	31	1,888	959	846	83
Not absolute blindness	69	4,218	2,937	1,173	108

TABLE 13.—*Individuals Approved for Aid to the Blind, Classified by Sex and Extent of Vision.*

Extent of Vision	Number by Sex: Total	Male	Female
Total	6,106	3,699	2,407
Absolute blindness	1,888	1,126	762
Not absolute blindness	4,218	2,573	1,645

TABLE 14.—*Individuals Approved for Aid to the Blind, Classified by Region and Extent of Vision.*

Location	Number by Extent of Vision: Total	Absolute Blindness	Not Absolute Blindness
Total	6,106	1,888	4,218
Region I	984	289	695
Region II	985	240	745
Region III	1,102	388	714
Region IV	621	193	428
Region V	497	189	308
Region VI	498	132	366
Region VII	1,158	386	772
Region VIII	261	71	190

TABLE 15.—*Individuals Approved for Aid to the Blind, Classified by Race and Treatment Recommended.*

Treatment Recommended	Per Cent of Total	Number by Race: Total	Anglo-American	Negro-American	Latin-American
Total	100	6,106	3,896	2,019	191
No treatment	86	5,235	3,307	1,767	161
Operation on eye	<1	9	5	3	1
Treatment of eye	2	93	68	25	0
Glasses	1	67	49	16	2
Systemic treatment	1	79	36	43	0
All other	10	623*	431	165	27

*Operation on eye and glasses 596; operation on eye and treatment of eye 20; operation on eye and systemic treatment 3; treatment of eye and systemic treatment 2; treatment of eye and glasses 1; and operation on eye, treatment of eye, and glasses 1.

TABLE 16.—*Individuals Approved for Aid to the Blind, Classified by Sex and Treatment Recommended.*

Treatment Recommended	Number by Sex: Total	Male	Female
Total	6,106	3,699	2,407
No treatment	5,235	3,201	2,034
Operation on eye	9	7	2
Treatment of eye	93	57	36
Glasses	67	34	33
Systemic treatment	79	51	28
All other	623*	349	274

*Operation on eye and glasses 596; operation on eye and treatment of eye 20; operation on eye and systemic treatment 3; treatment of eye and systemic treatment 2; treatment of eye and glasses 1; and operation on eye, treatment of eye, and glasses 1.

5. Tables 8, 9, and 10 concern the etiological factors involved and, frankly, these tables are a disappointment in many respects. For example, 71.5 per cent of the 6,106 cases have had to be tabulated under "Etiology Undetermined or Not Specified." Certainly this percentage is too high to be complimentary to the oculists upon whose "report of examination" the survey depended. One saving fact in this apparent weakness, however, is that for approximately two-thirds of this 71.5 per cent of all cases, the etiology has been correctly reported, perhaps, as "unknown to science." This would cover those cases due to glaucoma, cataract, and developmental or structural anomalies. Previous mention has been made of the high percentage of glaucoma and cataract cases on the rolls.

Other interesting notations made from a study of these tables (8, 9, and 10) are as follows:

a. Gonorrheal ophthalmia is found more often in Negro-Americans (0.3 per cent of the total) than in Anglo-Americans (0.1 per cent) or Latin-Americans (0.07 per cent), but—

b. Gonorrheal ophthalmia neonatorum is found in practically the same number of Negroes and whites and in fewer Latin-Americans.

TABLE 17.—*Individuals Approved for Aid to the Blind, Classified by Region and Treatment Recommended.*

Treatment Recommended	Number by Region: Total	I	II	III	IV	V	VI	VII	VIII
Total	6,106	984	985	1,102	621	497	498	1,158	261
No treatment	5,235	825	832	937	548	430	417	1,014	232
Operation on eye	9	3	0	2	1	2	1	0	0
Treatment of eye	93	17	8	11	9	6	14	26	2
Glasses	67	16	19	10	2	5	7	5	3
Systemic treatment	79	10	15	25	1	6	2	17	3
All other	623*	113	111	117	60	48	57	96	21

*Operation on eye and glasses 596; operation on eye and treatment of eye 20; operation on eye and systemic treatment 3; treatment of eye and systemic treatment 2; treatment of eye and glasses 1; and operation on eye, treatment of eye, and glasses 1.

TABLE 18.—*Cases of Trauma Classified by Type of Accident.*

Causes of Blindness	Number of Cases	Per Cent of Total
Trauma (including chemical burns):	422	100.0
A. Nonoccupational activities:	104	24.6
1. Birth processes	4	0.9
2. Medical and surgical procedures	7	1.7
3. Play or sport	53	12.5
a. Fireworks	1	0.2
b. Firearms	21	5.0
c. Other explosives	1	0.2
d. Sharp or pointed objects	7	1.7
e. Blows and falls	8	1.9
f. Foreign body	1	0.2
g. Other	14	3.3
4. Household activities	2	0.5
5. Traffic and transportation	8	1.9
a. Blows and falls	2	0.5
b. Other	6	1.4
6. Other nonoccupational activities	30	7.1
a. Firearms	5	1.2
b. Other explosives	1	0.2
c. Sharp or pointed objects	4	0.9
d. Blows and falls	1	0.2
e. Other	19	4.5
B. Occupational activities:	51	12.1
1. Firearms	1	0.2
2. Dynamite	8	1.9
3. Other explosives	3	0.7
4. Sharp or pointed objects	13	3.1
5. Blows and falls	5	1.2
6. Foreign body	3	0.7
7. Other	18	4.3
C. Activities, not specified:	267	63.3
1. Fireworks	1	0.2
2. Firearms	35	8.3
3. Dynamite	8	1.9
4. Other explosives	3	0.7
5. Sharp or pointed objects	85	20.2
6. Blows and falls	41	9.7
7. Foreign body	6	1.4
8. Other	88	20.9

TABLE 19.—*Estimated Number of Blind Persons in the United States, by States, 1940, and Number of Aid to the Blind Recipients, February, 1945.*

State	Population (in thousands) 1940	Estimated Rate of Blind Persons Per 1,000 Population	Estimated Number of Blind Persons	Number of Aid to the Blind Recipients Feb., 1945	Per Cent of Estimated Blind Receiving Assistance
United States	131,669	1.75	230,354	71,826	31.2
Alabama	2,833	2.60	7,366	750	10.2
Arizona	499	1.99	993	432	43.5
Arkansas	1,949	2.19	4,268	1,246	29.2
California	6,907	1.55	10,706	5,576	52.1
Colorado	1,123	1.55	1,741	493	28.3
Connecticut*	1,709	1.45	2,478	132	5.3
Delaware†	267	2.06	550	0	0.0
District of Columbia	663	2.47	1,638	216	13.2
Florida	1,897	2.56	4,856	2,273	46.8
Georgia	3,124	2.63	8,216	2,046	24.9
Idaho	525	1.15	604	206	34.1
Illinois	7,897	1.52	12,003	5,221	43.5
Indiana	3,428	1.69	5,793	2,089	36.1
Iowa	2,538	1.61	4,086	1,289	31.5
Kansas	1,801	1.72	3,098	1,061	34.2
Kentucky	2,846	1.63	4,639	1,610	34.7
Louisiana	2,364	2.69	6,359	1,398	22.0
Maine	847	1.77	1,499	825	55.0
Maryland	1,821	2.05	3,733	445	11.9
Massachusetts	4,317	1.58	6,821	959	14.1
Michigan	5,256	1.37	7,201	1,246	17.3
Minnesota	2,792	1.42	3,965	946	23.9
Mississippi	2,184	3.29	7,185	1,450	20.2
Missouri‡	3,785	1.87	7,078	3,000§	42.4
Montana	560	1.45	812	314	38.7
Nebraska	1,316	1.48	1,948	453	23.3
Nevada‡	110	1.53	168	27	16.1
New Hampshire	492	1.75	861	270	31.4
New Jersey	4,160	1.47	6,115	536	8.8
New Mexico	532	1.63	867	248	28.6
New York	13,479	1.44	19,410	2,921	15.0
North Carolina	3,572	2.25	8,037	2,281	28.4
North Dakota	642	1.30	835	117	14.0
Ohio	6,908	1.66	11,467	3,080	26.9
Oklahoma	2,336	1.69	3,948	1,852	46.9
Oregon	1,090	1.53	1,668	373	22.4
Pennsylvania‡	9,900	1.51	14,949	12,854	86.0
Rhode Island	713	1.44	1,027	97	9.4
South Carolina	1,900	2.90	5,510	899	16.3
South Dakota	643	1.51	971	215	22.1
Tennessee	2,916	1.97	5,745	1,535	26.7
Texas	6,415	1.82	11,675	4,630	39.7
Utah	550	1.12	616	129	20.9
Vermont	359	1.73	621	151	24.3
Virginia	2,678	2.30	6,159	953	15.5
Washington	1,736	1.54	2,673	598	22.4
West Virginia	1,902	1.37	2,606	816	31.3
Wisconsin	3,138	1.44	4,519	1,455	32.2
Wyoming	251	1.08	271	113	41.7

Source: *Social Security Bulletin*, Vol. 8, Nos. 3 and 4 (March and April, 1945).

*Data exclude program administered without federal participation concurrently with program under the Social Security Act.

†Does not administer aid to the blind.

‡Program administered without federal participation.

§Estimated.

c. A diagnosis of syphilis is made for three times as many Negro-American (4.8 per cent) as Anglo-American blind (1.7 per cent).

d. The number of white blind with trachoma is about twenty-three times the number of Negro blind with trachoma (5.0 per cent against 0.2 per cent).

e. Traumatic blindness is found in about twice as many white blind (4.2 per cent) as Negro blind (2.5 per cent). This is probably accounted for by the fact that in this section of the United States, at least, comparatively few Negroes work as mechanics or as other artisans.

f. Neoplasms are reported for six times as many white cases (0.4 per cent) as Negro cases (0.07 per cent).

g. General diseases causing blindness are reported four times as often for white cases (3.1 per cent) as for Negro cases (0.8 per cent).

As would be expected, diseases of the circulatory system are by far the predominant etiological factors in blindness.

6. In only 871 or 14 per cent of the cases which have been considered in this report has it been thought that treatment of any nature would be beneficial to the applicant in so far as restoring vision was concerned (Table 15). However, included in this 14 per cent were 605 persons who it was considered could be benefited, and vision probably restored to better than that considered as economic blindness, by surgical treatment. This alone is a considerable number of Texans in need of adequate treatment, and in the vast majority of these cases such treatment was impossible for them to obtain. The approximate *annual* cost to the State of Texas and the Federal Government in assistance alone to these 605 persons is in excess of $178,000. The cost of the aid to the blind program in Texas for the current year is about $1,400,000. These figures in themselves should cause some thought by others than the medical profession, for certainly the economic loss is terrific.

7. Because of the general interest manifested in blindness due to trauma, a table of statistics covers this subject in detail (Table 18).

GENERAL CONCLUSIONS

1. Economic blindness in Texas is much more prevalent than has been thought and represents both a medical and economic problem of the first order. At the time an aid to the blind program was being established in Texas (1941), it was estimated that there were not in excess of four thousand persons in the state eligible for such aid. It is surprising to note that up until January 1, 1945, some 8,443 applications for aid had been received and of this number 6,085 had been granted. (Note: The number receiving aid fluctuates from various causes such as improved vision, improved financial status, etc.) For comparative data table 19 is submitted, showing statistics released by the Federal Social Security Board on the estimated number of blind persons in the United States, by states, in 1940. This table gives the estimated number of blind persons in the United States as 230,354 and the rate of blind persons per 1,000 population as 1.75. According to the estimates by state, Texas has 11,675 blind persons to a population of 6,415,000 (a rate of 1.82 per 1,000 population) and ranks fourth among the forty-eight

states and the District of Columbia in estimated number of blind, but ranks sixteenth in rate of blind persons per 1,000 population. New York and Pennsylvania rank first and second in estimated number of blind persons, just as they rank first and second in population. But in estimated rate of blind persons per 1,000 population, Mississippi ranks first, with 3.29; and Wyoming, with a rate of 1.08 per 1,000, is lowest.

2. Medical care of Texans with eye diseases or injuries is deplorably inadequate.

3. No evidence is at hand which would indicate that there will be a diminution of economic blindness as long as present conditions continue to exist.

4. The competency of many physicians now practicing in Texas as ophthalmologists is doubtful and should be improved.

5. Especial need for surgical facilities for needed treatment of indigent Texans, especially in rural areas, is noted.

6. Closer coöperation between the various agencies now engaged in efforts to be of assistance to the blind population is essential.

7. The coöperation of the medical profession of the state and of state officials entrusted with the economic welfare of the state must be an accomplished fact to assure the correct handling of the problem presented by the economic blind.

I wish especially to express my thanks and appreciation for their wholehearted coöperation to Mr. Bee Grissom, Director, Division of Research and Statistics, Department of Public Welfare, and Mr. Herbert Wilson, Assistant Executive Director, Department of Public Welfare of the State of Texas.

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PENICILLIN MANUFACTURE IN EUROPE

Penicillin will be continuously available in several European countries as a result of arrangements which are being made by the United Nations Relief and Rehabilitation Administration, in cooperation with the Canadian government, it has been announced.

Czechoslovakia, Poland, and Yugoslavia will set up the first plants, under government ownership and operation, and other countries may join in the program later. The plans supplied by UNRRA to the countries are designed to implement production of 15 to 20 billion units of the drug each month from each factory.

The entire project is an international one. The plans were obtained through cooperation of a Canadian laboratory now manufacturing penicillin. The vats, tanks, and other component laboratory parts will be obtained by UNRRA in the United States. The three governments will obtain or erect the necessary buildings, and each of them will send to the Canadian plant two men well qualified in scientific research and production. These men will spend from four to six months in the Canadian establishment in study and training, then will return to their respective countries to act for their governments in setting up and operating the plants.

MATERNAL OVERPROTECTION IN YOUNG CHILDREN

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The great majority of patients normally seen in a pediatrician's office are over cared for. That is probably more true of the children seen by a pediatrician than those seen by physicians doing general practice. Both of the above statements are perhaps open to some argument, but I think no one will deny that children are now more supervised, more managed, from the cradle, and before, to maturity than ever before, and that the state of maturity is being pushed farther and farther up the chronological scale every day.

There are more and more children being spoon fed until they are grown, and I don't mean exclusively with food. More and more mothers are anxiously seeking books, lectures, and courses on "Child Care." Newspaper articles on "Your Child" or "Infant Care" are multiplying, and now, as always, these things are merely an indication of a trend. Juvenile delinquency seems to be increasing as a result rather than in spite of the desire on the part of mothers to "bring their children up" rather than to "let them grow."

"Maternal over protection" is a new term the psychiatrists are using for a rather restricted group. They usually refer to the "leaning over backward" of the mother of an unwanted or unloved child, or that possessive attitude of a mother for a son carried to such a degree that she shuts out all outside influences: work, boy scouts, friends, girls, and even the boy's father.

I think it should also include the extremely large group of over-zealous mothers who think that their child is to be fed, watered, taught, grown, slept, worked, exercised, or rested according to some very rigid set of rules. These mothers start out by thinking the child will be ruined if he takes only three and one-half ounces at a feeding when four ounces is prescribed. She reads many books, and tries to reconcile contrary opinions. She wants from the pediatrician—always—specific detailed instructions as to number of teaspoons of this and number of ounces of that. She is the mother who sits and watches the clock, and would rather commit a mortal sin than feed the child five minutes early or late. She is afraid to talk to Mrs. Jones regarding *her* physician's instructions about *her* baby for fear she will get mixed up, and afraid not to talk for fear Mrs. Jones got some information her doctor forgot to expound to her. As her child grows older, behavior problems of her own making arise, and she is

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unable to see her problem in proper perspective.

As to the causes involved, I think there are several factors. First there is ambition. The mother wants a super baby, not for the baby's sake, but for the reflected glory in which she will bask. Then there is the inevitable desire that her baby will have a better start, a better childhood, and will have fewer problems to face than she had, forgetting that it was surmounting those problems that helped her to build character and self reliance. The fear of failure, that the child will be found wanting, not by himself, but by his mother's friends, is another driving force. The top factor, though, I think, is the desire to manage and direct completely this child who for the time being is the mother's whole world.

Back of these components, of course, is a mother without enough outside interests. She indicts herself when she asks, is it true that when the child goes to school a lot of problems will vanish? This situation comes up much more often with first children or with only children, but that is only part of it. From every side mothers are being bombarded by groups interested in child care, by P. T. A.'s, by women's clubs, by churches, by schools, by government, and I am afraid by pediatricians. Very often a mother confused by a lot of conflicting information appeals to pediatricians who are more impatient than sympathetic. They are usually too busy giving specific instructions about some minor ailment to attend to the broader and much more complex job of rearing a child. If they weren't too busy I wonder if pediatricians are capable of helping?

The older medical practitioner was supposed to be too much addicted to patting a mother on the back and saying, "There, there, my good woman! He'll be all right in the morning." But by that very act he allayed fear, which underlies the attitude of most mothers who magnify their child's ills and gives too much importance to little problems.

The obstetrician, the pediatrician, and the general practitioner have the opportunity to lay a groundwork of confidence and a feeling of security in such mothers if they will recognize the situation early and try to get the mothers to see things in proper perspective. Later on, the prescribing of nursery schools, summer camps, boy scouts, and so on is an admission of failure all around. The mother rarely admits that nursery school is good for her child because it takes the child away from a bad influence at home.

If one of these mothers can be made to see that it doesn't make much difference if her child takes only half an ounce of orange juice instead of one ounce, her child gets his first tooth at eight months instead of at six months as her "baby book" indicated he should, or if he takes only five ounces at a feeding when Mrs. Jones's baby the same size and age takes seven ounces—I say, if she can be made to see that such things are inconsequential, she will have come quite a long way.

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A CLINICAL AND PATHOLOGICAL STUDY OF 170 OVARIAN TUMORS

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From 1933 to 1944 there have been 170 cases of ovarian tumors occurring in approximately 20,000 surgical tissue specimens at Parkland Hospital. These cases have been restudied histologically, classified, and the gross characteristics and clinical features reviewed from recorded data in the charts. Information obtained from this study constitutes the basis for the present report.

Incidence of Various Types.—In table 1, the incidence for the types of ovarian tumors is recorded. Dermoid cysts were the most frequent tumor, constituting 38 per cent of the total. In a series of cases recorded by Geist and Bernstein,[4] dermoid cysts were second in frequency, being surpassed by simple serous cysts. The high incidence of Negro patients in Parkland Hospital suggests that an increased racial incidence might account for the large number of dermoid cysts recorded here. In table 1 it will be noted that the percentage of dermoid cysts occurring in the Negro race far surpassed the incidence of the other types of tumors in Negro patients. Brown[1] has stated that dermoid tumors are more common in Negroes.

TABLE 1.—*Incidence and Some Clinical Characteristics of 170 Ovarian Tumors.*

Tumor Type	% Occurrence	Age Yrs.	Race: % Colored	Menometrorrhagia %	Abdominal Mass %	Abdominal Pain %	Duration Yrs.
Dermoid cysts	38	34	69	17	41	70	2.3
Serous cysts	19	45	39	10	30	40	2.8
Pseudomuc. cysts	11	43	32	10	60	40	0.9
Serous carcinomas	8.0						
Pseudomuc. carcinomas	5.5	50	29	14	36	65	0.7
Mixed carcinomas	2.4						
Granulosa tumors	7.0	39.5	40	83	66	50	—
Brenner tumor	2.4	22-59	—	—	0	0	—
Dysgerminoma	0.3	15	—	—	—	—	—
Fibromaleiomyoma	6.4	47	63	27	73	64	2.8
Arrhenoma	0						

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A relatively low incidence of serous cysts is recorded here, we believe because of exclusion of a large number of simple cysts originating as broad ligament cysts, and particularly also of cysts which originated as follicular cysts and seldom attained a large size.

The incidence of other groups is in accord with other reports. Arrhenoma was not represented in the series, which is not surprising when the relatively small number of cases and the low incidence of arrhenoma are considered.

Age.—Age incidence was slightly lower in the dermoid cysts as compared to the other benign cysts. Carcinomas occurred at a slightly later age than the benign tumors, as would be anticipated. The age incidence of granulosal tumors is not well indicated by the average figure given since the age spread was so great (8 to 73 years).

Clinical Manifestations.—Three symptoms were outstanding in the entire group. These were excessive uterine bleeding, abdominal mass, and varying degrees and types of lower abdominal pain or discomfort. Although the excessive uterine bleeding was a frequent complaint, the incidence in all groups except granulosal and thecal tumors was probably not significantly greater than that encountered in a series of otherwise normal women of this age group (30 to 50 years). Abdominal pain or discomfort however was very common, as shown in table 1. The relatively greater incidence in dermoid cysts is probably explained by the very frequent inflammatory changes in the cyst, and in carcinomas because of the peritoneal and pelvic infiltrations which occurred. Slower-growing tumors are probably a little more likely to be appreciated by the patient as an abdominal mass because a longer time for recognition is allowed.

The shorter duration of symptoms in pseudomucinous as compared to serous cystadenomas probably indicates a more rapid progress in size of the former, which would be expected from their multilocular structure. A short duration of symptoms for the group of carcinomas suggests either that there is no preceding benign tumor, or that carcinoma develops when the cyst is still small. The latter explanation seems more likely.

TABLE 2.—*Pathologic Features of 170 Ovarian Tumors.*

Tumor Type	Bilateral %	Multilocular %	Cyst Contents	Solid Tumor %	Hemorrhagic Infarct %	Malignant Change %	Inflammatory Reaction %	Size cm.
Dermoid cyst	10	28	Sebaceous—100%	0	3	3.3	35	9
Serous cyst	15	44	Serous—93%	0	3	0	7	14
Pseudomuc. cyst	0	81	Mucoid—81%	0	6	0	0	14
Adenocarcinoma	22	88	Serous or Mucinous 100%	22	3	100	0	12.7
Granulosa tumors	10	0	Solid yellow color—50%	100	10	10	0	12.4
Brenner tumor	0	—	Solid fibrous	100	0	0	0	0.8-3.0
Dysgerminoma	0	0		100	0	—	0	
Fibroma-leiomyoma	0	—	Solid fibrous	100	0	0	0	17.0

GROSS AND MICROSCOPIC PATHOLOGY (TABLE 2).

1. *Dermoid Cysts.*—These cysts were usually unilocular and unilateral. They averaged 9 cm. in diameter and varied from 1 to 30 cm. A constant feature was the sebaceous or oily content. Occasional cysts contained also separate locules with mucous or serous fluid. Sebaceous material was found in 100 per cent of the cases and hair was noted in 95 per cent. The components noted on gross and microscopic examination were stratified squamous epithelium, mucus secreting columnar epithelium, pseudostratified columnar epithelium, skin appendages, fibrous tissue, fat, muscle, cartilage, bone, nervous tissue, mucous glands, teeth, thyroid, and melanoblasts. In one-third of the cases the cyst was apparently composed only of a stratified squamous epithelium and skin appendages; however, in another third the epithelium was completely missing from sections. The wall of these dermoid cysts had a characteristic and constant arrangement. The inner layer, of course, was epithelium, outside of which was a zone of dense, often hyalinized fibrous tissue and, further out, a zone of fibrous and fatty tissue. The dermoid "hillock" was studied histologically in a number of cases. Skin, skin appendages, and fatty-areolar tissue made up this structure. A notable observation in the hillock was the presence of typical apocrine glands in most cases. This favors reproduction of genitaloid tissue rather than scalp structures, as has been suggested for the dermoid hillock. In one-third of the cases some type of inflammatory change was noted in the cyst wall. The most common type, hitherto variously interpreted as sieve-like structure,[6] or fat absorption,[3] was the presence of typical foreign body fat granuloma which was characterized by large vacuoles of fat surrounded by multinucleated foreign body giant cells and fibrous tissue. Tuber-

culosis of the cyst wall was encountered in 1 case. Two dermoid cysts were malignant: one was an epidermoid carcinoma, the other a papillary serous carcinoma.

Two main possibilities of histogenesis exist for these tumors: (1) ovular origin, and (2) germinal epithelial origin. Favoring the latter was the finding in this series of a few instances of development of stratified squamous epithelium in small inclusions of the germinal epithelium, nearby to small cyst elements. This evidence is only suggestive, however.

2. *Serous Cysts.*—Bilateral cysts were encountered in 15 per cent, while 66 per cent were unilocular. Characteristically, they all contained a clear fluid which was thin. The size varied from 4 to 27 cm., averaging 14 cm. Two cases had small wart-like papillae on the exterior. The serous cysts were further subdivided as follows: simple serous cysts, 7 cases; and papillary serous cystadenomas, 20 cases (unilocular, 8 cases and multilocular, 12 cases).

The lining epithelium of these cysts was variable but always non-mucus producing, serous type. It was, in a few cases, cuboidal, indistinguishable morphologically from ovarian surface epithelium (germinal epithelium). This particularly occurred in simple serous cysts. Most cysts had a simple, moderately tall columnar lining, while one-third had, in some areas, typical fallopian tube type of epithelium. These forms of epithelium which were encountered are evidence against a teratoid origin, and favor origin from the germinal epithelium of the ovary, which, it would appear, is capable of reproduction of several related types of epithelium.

Papillae were noted in 20 cases. In 7 they were thick and edematous. In 12 cases there were low, rather inactive appearing papillae, while in 8 cases there were complex branching papillae. In 4 of these 8 cases the epithelium was considered to be slightly anaplastic but non-invasive. This type of papillary process in serous cysts is considered, therefore, to indicate a possible pre-carcinomatous stage. The stroma of the wall of the serous cysts was almost always cellular and resembled ovarian stroma.

3. *Pseudomucinous Cystadenoma.*—None of this series was noted to be bilateral. Pfannenstiel[7] recorded a very high incidence of unilateral occurrence of this type (80 per cent). Eighty-one per cent of our cases were multilocular. The size varied from 5 to 23 cm., averaging 14 cm. Usually pseudomucinous cysts are reported to be larger than serous cysts, however. One-half of these tumors had papillary projections. The contents were pseudomucinous in type except in 3 cases which were described as containing clear, watery fluid.

The epithelial type was highly constant, consisting of quite tall mucous cells, with nuclei palisaded at the basement membrane. A feature noted in 5 cases, previously undescribed, as far as I know, was the presence of typical tubulo-alveolar, mucus-secreting glands closely resembling the glands of the cervix uteri. These were located in the cyst wall and often communicated with the cyst cavity. The similarity of the epithelium of pseudomucinous cysts to cervical epithelium has been previously noted.[5] In 2 cases the surface epithelium of adjacent ovarian tissue was found to be mucoid in type.

The teratoid origin of these tumors has been maintained by some.[6] In our series we found nothing to suggest it. The fact that in some areas serous and tubal epithelium were found in otherwise characteristic pseudomucinous cystadenomas might indicate an origin from the ovarian germinal epithelium.

4. *Adenocarcinomas.*—In all, there were 27 cases of adenocarcinoma. Papillary serous cystadenocarcinoma predominated. Four cases were papillary serous, but contained areas of reproduction of epidermoid epithelium. Types of carcinomas encountered are given in table 3.

TABLE 3.—*Types of Carcinomas in the Series.*

Papillary serous cystadenocarcinoma	18
Unilocular	1
Multilocular	13
Solid	4
Pseudomucinous cystadenocarcinoma	9
Unilocular, non-papillary	1
Multilocular, non-papillary	1
Multilocular, papillary	5
Solid	2

This tabulation reveals that practically all carcinomas of the ovary are papillary-cystic or solid tumors. They are only rarely unilocular. The chances of a non-papillary, cystic tumor, which is not a dermoid cyst, of being carcinoma are 2 to 17; of a unilocular, papillary cystic tumor, 1 to 8; and of a multilocular papillary tumor, 18 to 12, according to the distribution of our cases.

Bilateral occurrence was more common in the carcinomas, being present in 22 per cent of all adenocarcinomas.

The epithelium of these cases of carcinoma usually, but not always, retained the characteristics of the original benign tumor to some extent. In those instances where anaplasia was marked, mucinous secretion tended to be lost as a characteristic. This undoubtedly results in a falsely high incidence of serous carcinomas. It is thought that the relative frequency of pseudomucin-

ous cystadenocarcinoma in a series is, in part, dependent upon the care with which evidence of mucoid production is sought for histologically.[2]

The criteria for classification of ovarian tumors as carcinomas were two, namely anaplastic epithelium and evidence of stromal invasion. Anaplasia was present in all cases and stromal invasion in all except 4 cases. Also, gross peritoneal extension of nodular and papillary external surfaces were found in more than half the cases.

The papillary structures of the adenocarcinomas were often edematous, but were nearly always also of the bulky, complex, branching type. Persisting benign cystic structures were found in some areas in 4 cases. Most of the ovarian adenocarcinomas had very little desmoplastic stromal reaction; formation of gland structures occurred in slightly less than one-half.

5. *Granulosa and Theca Cell Tumors.*—Two of the 12 cases of this group were thecal tumors. In 1 case there were bilateral tumors. Except for small degenerative cysts they were all solid tumors. In one-half the cases, a yellowish color was noted on section. The external surface was smooth but lobulated. The size of these tumors varied from 7 to 25 cm., averaging 12 cm. The incidence of the solid ovarian tumors and the position of granulosal tumors in this group are revealed in table 4.

TABLE 4.—*Incidence of Solid Tumors and Position of Granulosa Tumors in the Series.*

Total number of solid tumors in 170 cases	33
Granulosa cell tumors	10
Fibroma	9
Serous adenocarcinoma	4
Brenner tumor	4
Pseudomucinous adenocarcinoma	2
Theca cell tumor	2
Leiomyoma	1
Dysgerminoma	1

Granulosa cell tumors, in this series, were the most common solid tumors, therefore.

Histologically a variable structure was noted. The most common pattern was that of formation of retiform groups of epithelial-like cells separated from one another by spindle cell stroma (66 per cent). Others presented a diffuse cellular growth (including the two thecomas) with or without formation of micro or macro-follicular structures. Call-Exner structures were found in 8 cases of the total of 12. In addition to the much more common spindle cell stroma, there were occasional foci of myxomatous connective tissue stroma. We agree with some other observers[6] that it is difficult or impossible to determine histologically whether these tumors are malignant. They are all embryonic but present few anaplastic characteristics.

In 6 cases of this group the type of endometrium was known. There was hyperplasia of the endometrium in 4 cases and in the other 2 the endometrium was in the late proliferative (estrogenic) phase.

6. *Fibromas and Leiomyomas.*—These tumors were all solid tumors, sometimes with small areas of cystic degeneration. A very smooth external surface and pale gray or pink, fibrillar cut surface were found to be characteristic of the group.

Histologically the fibromas were characterized by moderately cellular, fibroblastic and fibrous tissue cell proliferation, producing varying amounts of collagen. The formation of intercellular material assisted in differentiation from thecomas. A few areas of myxomatous stroma were noted. One fibroma was quite cellular and had a few mitoses but was considered still to be a benign tumor. The leiomyoma could not be distinguished histologically from uterine leiomyoma.

Throughout the series of fibromas the similarity of the tumor tissue to the ovarian stroma was always noted. Collagen formation was usually greater than is encountered in ovarian tissue. It is thought by some that these tumors originate from the ovarian mesenchyme instead of from fibrous tissue developing as a part of the repair process associated with corpora lutea.[4]

7. *Brenner Tumor.*—The four tumors falling in this group were all small, from 0.8 to 3 cm. in size, being encountered incidentally, associated with other acute and chronic pelvic diseases. Grossly they were all solid, firm, fibrous, and well circumscribed tumors. Histologically they conformed to the universally recognized structure. Epithelial tests in this group showed no significant cystic changes. They resembled entirely the so-called Walthard rests encountered in normal ovarian and broad ligament tissue. The stroma was identical with the structure of the fibromas described above. In two cases Walthard cell elements seemed to be undergoing regression, atrophy, and calcification, which suggests that complete disappearance of these structures might lead to the development of a fibroma.[6]

8. *Dysgerminoma.*—One case in a 16-year-old girl was encountered in this series. It was a solid, soft, gray tumor and unilateral. It was made up of broad cellular cords separated by a scanty fibrous and lymphocytic stroma. The cells of the cords were large and polyhedral with large, coarsely granular nuclei, resembling in all re-

spects the tumors which have been reported in the literature.

SUMMARY

In a survey of 170 ovarian tumors, the most common type was the dermoid cyst. All other tumors were represented in expected proportions. No arrhenomas occurred. Dermoid cysts seemed to occur much more readily in Negroes. Menometrorrhagia, abdominal mass, and abdominal pain were the leading clinical manifestations. Carcinomas were somewhat more commonly bilateral than the benign tumors. The combination of uni- or multilocularity and the presence or absence of papillae gave rise to the following statistical likelihood of a given cystic tumor being carcinoma: unilocular, non-papillary cyst, 2 to 17; unilocular, papillary, 1 to 8; multilocular, papillary, 18 to 12.

Granulosal tumors were the most common solid tumors, with fibromas next in frequency. Histological study gave some indication that serous cysts, pseudomucinous cysts, and possibly dermoid cysts might have their histogenesis in the germinal epithelium of the ovary.

REFERENCES

1. Brown, T. H.: Ovarian Cysts in the Negress, Bull. Johns Hopkins Hosp. 10:44, 1899.

2. Caldwell, G. T.: Personal communication.

3. Ewing, J.: Neoplastic Diseases: A Treatise on Tumors, ed. 4, Philadelphia, W. B. Saunders Company, 1940.

4. Geist, S. H.: Ovarian Tumors, New York, Paul B. Hoeber, Inc., 1942.

5. Meigs, J. V.: Tumors of the Female Pelvic Organs, New York, The Macmillan Company, 1934.

6. Novak, E.: Gynecological and Obstetrical Pathology with Clinical and Endocrine Relations, Philadelphia, W. B. Saunders Company, 1940.

7. Pfannenstiel, H. J.: Die Erkrankungen des Eierstocken und Nebeneierstocken. In Veit's Handb. der Gynäkologie, ed. 2, Weisbaden, J. F. Bergman, 1908.

Parkland Hospital.

THE TOM GREEN COUNTY TUBERCULOSIS ASSOCIATION PROGRAM

WELDON SURBER
President, Tom Green County Tuberculosis Association
and
VICTOR E. SCHULZE, M. D., F. A. C. P.
Chairman, San Angelo Board of Health
SAN ANGELO, TEXAS

In the midst of war's holocaust, it is a privilege indeed to review the program of the Tom Green County Tuberculosis Association, a part of a national crusade to save lives from an age-old adversary, more treacherous, ever-present, and in the aggregate more destructive to human life than all the wars. The 200,000 people who survived in 1944 but who would have succumbed to tuberculosis if the 1913 mortality rate of this disease had remained unchanged, attest amply to the victorious prosecution of our purpose.

Prepared for reading before the Section on Public Health of the State Medical Association of Texas at the Annual Session in Galveston, May 8-10, 1945, cancelled because of war conditions.

The people have expressed their wish that tuberculosis be controlled by their generosity in response to seal sales which in Tom Green County in 1944 totalled $10,563.21, approximately 20 cents per capita. By the same sign they have voiced their confidence in the Tom Green County Tuberculosis Association which, in turn, is charged with the responsibility to respond effectively, to give full value received of its supporters.

Unstinted coöperation on the part of the Tom Green Eight County Medical Society, the San Angelo Board of Health, the San Angelo Public Schools, the San Angelo City Council, and the Tom Green County Commissioners Court has facilitated availability for tuberculosis control in Tom Green County all effective methods short of provision for the segregation of infectious cases.

The program short of this ultimate goal is epitomized below.

SUPPORT OF HEALTH UNIT

The establishment of a full-time, State Health Department-affiliated, City-County health unit (the San Angelo-Tom Green County Health Unit) by the San Angelo Board of Health in May, 1944, was recognized as a boon to tuberculosis control and has been given enthusiastic support by the Tom Green County Tuberculosis Association, particularly through efforts directed toward organization of public opinion favorable to the Unit and convincing the respective appropriating bodies of this community need.

CASE-FINDING PROGRAM

The ordinance pertaining to the sale of prepared foods, recommended by the San Angelo Board of Health and adopted by the City Commission on May 22, 1944, requires an annual chest roentgen-ray examination of each food handler. This requirement has resulted in the finding of 34 cases to date. Tuberculin skin testing in coöperation with the Health Unit personnel of all school children and teachers in the city and county with subsequent chest roentgenograms of positive reactors by private physicians or the photofluorographic unit of the State Health Department is in progress. Additional contact-case finding in the course of home visitations by the Health Unit nurses concludes the present source material of case finding. Particular emphasis is presently being given to case finding in the Latin-American populace, known from State Health Department statistics to have the highest incidence of tuberculosis in this community. Plans to give emphasis to the contact-sources of positive

reacting pre-school children have been formulated.

TUBERCULOSIS CONTROL CLINIC

Invited by the San Angelo Board of Health to initiate a Tuberculosis Control Clinic, the Tom Green County Tuberculosis Association responded with the expenditure of $3,000, with which were provided appropriate quarters for the Tuberculosis Control Clinic, adjacent to the Health Unit quarters, and necessary equipment, including a fluoroscope, pneumothorax apparatus, scales, and filing cabinets. A properly qualified practicing physician has been secured and will be remunerated by the Association for his conduct of the weekly clinic. The public health nurses of the Health Unit will arrange for eligible patients, assist the physician, and conduct the follow-up service. The Association is offering to defray the expenses of an additional public health nurse especially trained in tuberculosis health nursing to be employed by the Unit for the purpose of supervising the Tuberculosis Control Clinic and consulting with the other public health nurses in particular phases of this problem.

Anticipating a large Latin-American representation in the Clinic clientele, the Association has sponsored and defrayed the expenses of a class in conversational Spanish for interested health workers and nurses.

The Medical Advisory Board of the Association has approved the following requirements of eligibility for Clinic admission: county citizenship, relief-roll patronage, or reference from licensed physicians of the county, excepting Mexican and Negro patients not presently in the care of a private physician and in the judgment of the Clinic physician eligible for charity care.

Although the Tuberculosis Control Clinic will provide facilities for pneumothorax therapy, the principal function expected of this Clinic will be to fortify the educational program. The Tuberculosis Control Clinic is purposely not diagnostic in function, adequate local private facilities being available to the Association for such purposes on a nonprofit basis. This arrangement enhances contact with and coöperation by local physicians so necessary to a successful tuberculosis control program. Further, the unnecessary duplication of expensive equipment in the community is obviated.

REHABILITATION

Too frequently zealous amplification of facts concerning tuberculosis have resulted in jeopardizing the tuberculosis patient's chance of return to economic independence. More frequently, perhaps, return of the patient to his former arduous work has jeopardized his chance of eventual lasting recovery. And more often still, undoubtedly, recovery has been thwarted by thoughts given to possible economic dependency. Vocational rehabilitation therefore is a necessary part of our program. It is expected that the organization of the Tuberculosis Control Clinic will facilitate the opportunity for this work for which the local secretary, Mrs. Louis Gayer, has demonstrated a particular interest, guided by the National Association and working in coöperation with the Rehabilitation Service of the State Department of Education.

EDUCATIONAL PROGRAM

Until recently the local program was given largely to a well conceived, skillfully conducted program of health education in tuberculosis. This preparation has made possible the presently contemplated enlarged program outlined above. The promulgation of health truths must continue as the fundamental function of our Association, abetted by new devices and technics provided through improved facilities such as the Tuberculosis Control Clinic. As in the past, lectures, exhibits, and motion pictures are being presented to organized community groups, service clubs, federated clubs, and parent-teacher associations. In coöperation with the public school faculty, the Association for the past three years has conducted the classes in health on the subject of tuberculosis. Every phase of and contact provided by the program is ripe in educational opportunity of one kind or another. In the past the subject of this education was tuberculosis—the disease; now it must more concern effective control of tuberculosis.

AGENDA

Additional to our teaching of health truths, our educational program must have insinuated in it progressively the concept that truly effective tuberculosis control is dependent on provisions for the isolation and treatment of tuberculosis cases in the community. That means tax-supported sanatorium beds, two beds for each annual death in the community. The prerequisite to such project is the organization of public opinion through education, which is the prime function of our organization. The challenge is defined; the time for its acceptance is now.

115 West First Street.

Extreme care must be exercised to ensure that no cases be stigmatized with the diagnosis of tuberculosis or tuberculosis suspect on one roentgenographic observation. Careful clinical history and physical examination are still required for diagnosis.—Carleton B. Peirce, M. D., et al., Am. Rev. Tuberc., July, 1945.

CLINICAL AND PATHOLOGICAL CONFERENCE

FACULTY IN PEDIATRICS, MEDICINE, AND PATHOLOGY

University of Texas School of Medicine
GALVESTON, TEXAS

Dr. M. L. Surgi: B. A. M., a 5 months old, white female was born in John Sealy Hospital, her birth weight being 6 pounds, 9.5 ounces. She was discharged on the tenth day, weighing 5 pounds, 14 ounces. She nursed poorly and regurgitated frequently and had a mild diarrhea during her stay.

The child was re-admitted two days after dismissal with a chief complaint of vomiting and diarrhea. Physical examination revealed weight 5 pounds, 6 ounces, moderate dehydration, and a paucity of subcutaneous fat. She was given frequent hypodermoclyses and an adequate formula. Mead's lactic acid milk, Nutramigen, and Casec were tried in that order. She had one course each of sulfaguanidine and sulfadiazine with no cessation of diarrhea, which persisted as three to eight large greenish-yellow stools a day. Occasional vomiting occurred, and although the hospital course was afebrile the patient intermittently developed a severe bronchitis and cough. Supportive transfusions and vitamins were given also.

Urinalysis, blood picture, roentgenogram of chest, and nonprotein nitrogen in the blood were normal. Cholesterol was 62.5 mg. per 100 cc. of blood. Duodenal contents were aspirated on March 7, 1945, and tested for trypsin activity. A value of 10 mg. per 100 cc. of original duodenal contents was reported, the normal range of this test being 25 to 50 mg.

In view of the patient's failure to gain weight on an adequate diet, the intermittent bronchitis, frequent large stools, and the definite evidence of impaired pancreatic function, a diagnosis of cystic fibrosis of the pancreas was made.

The patient was sent home on a Casec formula with pancreatin added (1 Gm. per 6 ounces of formula). Supplemental vitamins and iron were also given. She weighed 7 pounds, 7 ounces on dismissal. This represented a gain of 2 pounds, 10 ounces in a period of three and one-half months. Stools were less frequent, being one to two a day.

The child was readmitted twelve days later because cough had become explosive and caused difficult respirations and cyanosis. A roentgenogram revealed central pneumonia on the right side. A blood transfusion was given and the child was dismissed essentially unimproved. She was readmitted two weeks later with the same complaints plus a febrile reaction. A chest roentgenogram revealed small patchy consolidated areas in the left base and infiltration of the right hilum. The child subsequently died.

The cause of death was noted as cystic fibrosis of the pancreas and bronchopneumonia.

DISCUSSION

Dr. Arild E. Hansen: Postmortem protocols, clinical records, and various hospital records show the death of many babies in the past has been attributed to such ill defined conditions as marasmus, athrepsia, and/or feeding problems. This situation is to be found in almost every hospital throughout the country. Today, the diagnosis of cystic disease of the pancreas is being made instead of such vague diagnosis. Credit for this change in diagnostic acumen of physicians is due in large part to the studies of Dr. Dorothy Anderson of Columbia University Babies' Hospital. She found pathologic changes in the pancreas in many of these infants, and she believed these to be the cause of the metabolic disturbances in these babies. Diarrhea is a prominent symptom of cystic fibrosis of the pancreas. Both fat and vitamin A are poorly absorbed, and a defect in carbohydrate and protein absorption is

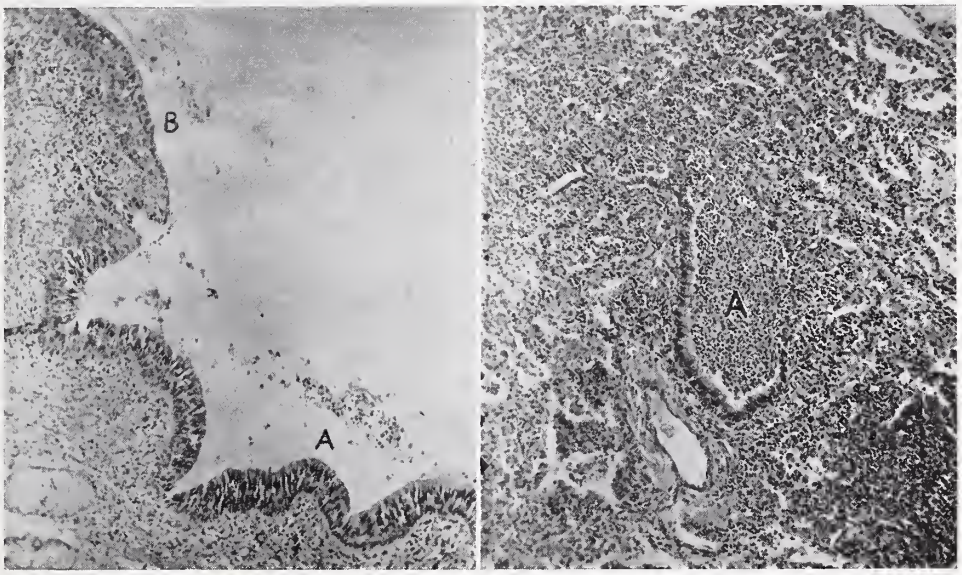


FIG. 1. (Left) Photomicrograph of bronchus showing squamous metaplasia and inflammatory changes. Note normal ciliated epithelium at "A" and the squamous metaplasia at "B."
(Right) Photomicrograph of lung showing purulent bronchitis and lobular pneumonia. Note bronchiole at "A" containing purulent exudate with pneumonia in the surrounding lung tissue.

Presented June 26, 1945, to the junior and senior classes at the University of Texas School of Medicine.

usually present. Bronchitis and bronchiectasis characteristically develop in variable lengths of time. Family histories reveal that if one case has occurred others usually are found in the same family.

One feature of significance is that this condition can be diagnosed quite specifically. If the physician removes the duodenal contents for study of the enzyme activity, for example, lipase, amylase, and particularly trypsin, he will note that they are low in cystic fibrosis of the pancreas. Vitamin A is poorly absorbed and the fasting level is low. Absorption studies of vitamin A also have been found to be very useful in diagnosis by a number of investigators. The serum cholesterol is reported also to be low. Rather extensive blood lipid studies were carried out in the Lipid Research Laboratories at the University of Minnesota by Dr. Luigi Luzzatti and myself. We found the fasting serum lipid levels, including cholesterol, of patients with the celiac syndrome to be within normal limits. Characteristically, however, it was found that the degree of unsaturation of the fatty acids in the various fractions of the blood was very low. This probably reflected the inability of patients to absorb fat normally and indicated that these infants virtually existed on a diet very low in fat. Incidentally, the results of these studies also suggested that highly unsaturated fatty acids are not synthesized by the human organism, at least those with this condition. Fat absorption studies were made employing fats of both low and high degrees of unsaturation. The fatty acids present as acetone insoluble (phospholipid) and acetone insoluble (cholesterol ester and triglycerides) in addition to total cholesterol and cholesterol ester were determined. From these studies it was concluded that the degree of rise in fat level following a fatty meal and the value of the iodine number of the fatty acids appeared to have prognostic significance.

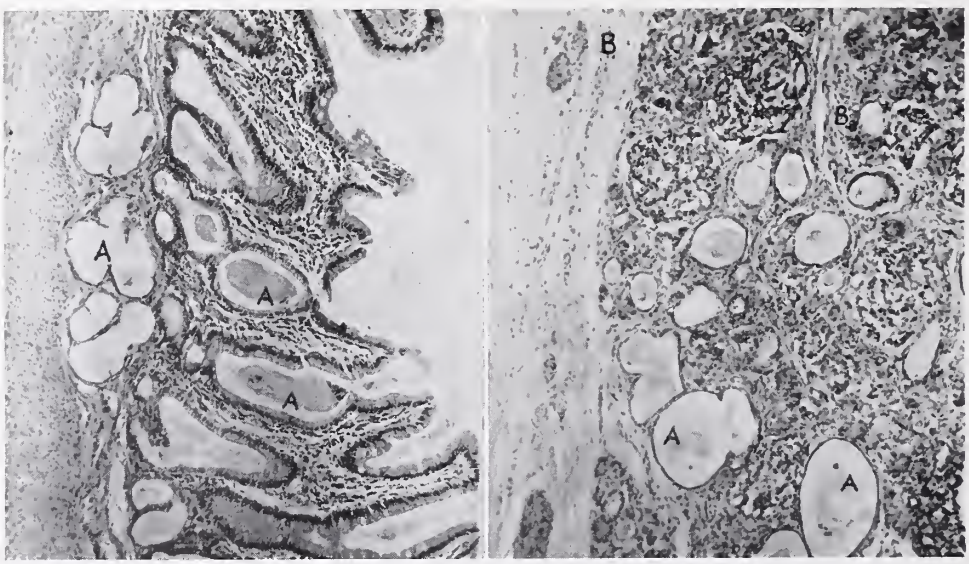


FIG. 2. (Left) Photomicrograph of duodenal mucosa showing secretion in glands "A" with dilatation. (Right) Photomicrograph of pancreas showing cystic dilatation of ducts, "A," and fibrosis, "B."

PATHOLOGIC FINDINGS

Dr. Paul Brindley: The pathological diagnoses in the case reported were:

1. Fibrocystic disease of pancreas.
2. Emaciation.
3. Squamous cell metaplasia of tracheal and bronchial epithelium.
4. Purulent bronchitis and bronchiectasis.
5. Lobular pneumonia.

At necropsy marked emaciation was noted. No excess fluid was found in any of the serous cavities. The heart showed a few small subpericardial hemorrhages.

The right lung weighed 100 Gm. (normal for this age, 38 Gm.) and the left 80 Gm. (normal, 35 Gm). The organs were similar in appearance and in their anterior portions showed some emphysema while other areas showed patchy consolidation. The bronchi contained tenacious yellow mucopurulent exudate and on section seemed unusually prominent and dilated. Microscopically a rather marked squamous metaplasia of the tracheal and bronchial epithelium was found associated with a mucopurulent inflammatory reaction of the bronchial and tracheal walls with some dilatation of the bronchi (Fig. 1, left). An extensive lobular pneumonia was present (Fig. 1, right). The thymus and neck organs were not remarkable.

There was gaseous distention of the gastro-intestinal tract and microscopically many of the mucosal glands in the duodenum showed dilatation and contained pink staining material suggesting inspissated secretion (Fig. 2, left).

The pancreas seemed small and cut with some increased resistance. No gross evidence of obstruction to any of the larger ducts was found. Micro-

scopically many of the smaller ducts showed dilatation and contained pink staining, somewhat lamillated material in which a few lymphocytes were seen. An increase of fibrous tissue was also present and this contained a few lymphocytes. The acinar tissue was diminished in amount but the islet tissue did not appear to be involved to any great extent in the process (Fig. 2, right).

The liver weighed 240 Gm. (normal 180 Gm.) and microscopically showed a slight fatty change. Nothing unusual was found in the bile ducts and gallbladder.

The spleen and adrenal glands were not remarkable.

Examination of the genito-urinary system showed fetal lobulation of the kidneys but nothing else unusual. There was no evidence of squamous metaplasia involving the endometrium.

This case was apparently one of fibrocystic disease of the pancreas associated with malassimilation of food, vitamin A deficiency, followed by squamous metaplasia of the tracheal and bronchial epithelium and a bronchitis, bronchiectasis, and finally a terminal pneumonia.

The etiology of the condition is not definitely known. There is a tendency for it to occur in more than one child of a family. The pathogenesis is also not clearly understood. It has been suggested these individuals suffer from either a deficiency or insufficiency of the mucinase required for the maintenance of mucus in a normal physical state. This is supposed to result in blockage of the ducts of the pancreas and result in atrophic and fibrotic changes associated with pancreatic insufficiency. Other mucus producing glands have been reported as being involved in this disease process. The duodenal glands in this case showed some such involvement. The changes in the pancreas have, to date, proven irreversible and the condition to be incompatible with life.

DISCUSSION

Dr. Raymond Gregory: Were any fat studies of the stool done in this case?

Dr. Hansen: No fat studies of the stool were performed.

Dr. William C. Levin: Is there always diarrhea?

Dr. Hansen: No, diarrhea may not be an important symptom; however, in most infants this is the leading symptom.

Dr. Gregory: Do all cases that have diarrhea show fatty stools?

Dr. Hansen: Yes, if the patient is not on a diet very low in fat.

Dr. Gregory: Is the difficulty in the gut primary or secondary to a disturbance in secretive mechanism?

Dr. Hansen: It has been stated that the condition, meconium ileus, is a manifestation of the same disease which is present at the time of birth. We do not know whether this disease is caused solely by a faulty development of the pancreas or whether the changes in this organ result from faulty function of the pancreas as well as many secreting glands of the body. There is a question as to whether the disease is due solely to a lack of pancreatic secretion or whether there are some other changes in the tissues, for example in the intestinal mucosa, which are concerned with the disease.

Dr. Gregory: Is this the characteristic pathologic evidence of vitamin A deficiency?

Dr. Hansen: Quite so, according to various observers. Supplements of vitamin A help these infants to some extent; however, absorption of vitamin A is poor. There is a relation between vitamin A deficiency and respiratory infection when vitamin A deficiency exists. Some patients seem to do fairly well on pancreatin, but, it is not the therapeutic answer.

Dr. Gregory: What is the significance of the squamous metaplasia of the bronchial epithelium? Does it contribute to the pulmonary lesion?

Dr. Brindley: The replacement of the normal ciliated epithelial lining of the bronchi by stratified epithelium results in loss of the cleansing or protective action of the cilia, the function of which is the sweeping out of secretions and inhaled irritants and bacteria within the trachea and bronchi. This loss of function predisposes to infection, bronchitis, and bronchopneumonia. Practically all of these patients with fibrocystic disease of the pancreas ultimately die of pneumonia.

DANGER OF MALARIA EPIDEMIC DECREASING

Risk of introduction of an epidemic of malaria by returning soldiers from overseas is continually decreasing, according to a statement by Major General Norman T. Kirk, Surgeon General of the Army. The situation is reflected in the rate of admissions of malarious cases in hospitals in this country, which reached a peak of 6,000 cases in February, 1945, and has been following a declining curve since that time. It is expected that the rate will continue to go down because a large proportion of the personnel of divisions heavily seeded with malaria in the early stages of the war already have been returned to this country.

At one time this disease was incapacitating about ten times more American soldiers than Japanese implements of war. The progress of the war in the Pacific in the early stages was seriously impeded until a special malaria control organization was established which helped bring this hazard under control principally by anti-mosquito measures and atabrine. During this high incidence of malaria in the Pacific there was concern that epidemics might develop in this country with the return of soldiers who had been infected. Since atabrine is not a cure but only a suppressive in most types of malaria, it was feared that returned soldiers who had stopped taking atabrine would suffer relapses which would lead to the spread of the disease here.—S. G. O. Notes, Dec. 31, 1945.

MEDICAL OFFICERS RETURNING TO TEXAS*

(Corrections: DeWitt Claunch, formerly of Comanche, has returned to Fort Worth; James T. Downs, III, formerly Dallas, to Galveston; Herbert E. Hipps, formerly Marlin, to Waco; Robert D. McKee, formerly Fort Worth, to San Antonio; Glen V. Ryan, formerly Harlingen, to Indianapolis, Ind.; and Marvin C. Schlecte, formerly San Antonio to Houston. Celso Stapp, El Paso, was erroneously listed also at Burnet.)

NAME	Serv.†	Location	Release Date
Baylor-Knox-Haskell Counties			
1. Kimbrough, Earnest	A	Haskell	Dec., 1945
2. Phillips, Gordon	A	Haskell	
Bee-Live Oak-McMullen Counties			
4. Miller, Ernest E.	N	Beeville	
Bell County			
5. Gillespie, Charles H.	A	Temple	
6. Greenlee, Ralph G.	A	Temple	
7. Tubbs, Harry A.	A	Temple	
Bexar County			
48. Aderhold, James P.	N	San Antonio	
49. Allin, Willis W.		San Antonio	
50. Ashley, R. W.	A	San Antonio	
51. Atmar, R. C.		San Antonio	
52. Bondurant, W. W.		San Antonio	
53. Butler Thomas B.	N	San Antonio	
54. Childers, M. A.		San Antonio	
55. Hartman, A. W., Jr.		San Antonio	
56. Hill, Walter H.	N	San Antonio	
57. Holchouser, Charles A.		San Antonio	
58. Johnson, Max E.		San Antonio	
59. Letteer, Clarence R.		San Antonio	
60. Mozersky, Victor	A	San Antonio	
61. Orlando, Anthony M.		San Antonio	
62. Shacklett, Ernest D., Jr.	A	San Antonio	
63. Stansell, Paul Q.		San Antonio	
64. Tucker, Victor C.		San Antonio	
65. Walthall, Walter		San Antonio	
66. Weatherford, Jack M.		San Antonio	
Brown-Comanche-Mills-San Saba Counties			
7. Pope, F. M.	A	Brownwood[1]	Oct., 1945
Caldwell County			
1. Watkins, Pruett	A	Luling	
Cherokee County			
1. Hilliard, George	A	Jacksonville[2]	
Coleman County			
1. Moody, Charles O.	A	Coleman	Dec., 1945
2. Weaver, M. E.	A	Coleman	Dec., 1945
Collin County			
3. Bush, Holloway	A	McKinney	
Colorado County			
2. Hahn, William B.	A	Columbus[3]	
3. Wooten, J. H.		Columbus	
Coryell County			
1. Haynes, Henry M., Jr.	A	Gatesville	
Dallas County			
76. Cowan, William K.	A	Dallas	
77. Darrough, L. E.		Dallas	
78. French, Cecil M.	A	Dallas	
79. Hernandez, M. S.	A	Grand Prairie[4]	
80. Holman, Winston C.	N	Dallas	
81. King, Karl Bowen		Dallas	
82. Lett, James E.	A	Dallas	
83. McLaurin, Hugh L.	N	Dallas	
84. Martinak, Richard E.	A	Dallas	
85. Mooney, Ken		Dallas	
86. Moore, Halcuit		Dallas	
87. Morris, A. T.		Dallas	
88. Portman, Robert K.	A	Dallas	
89. Reaves, L. M.		Dallas	
90. Spence, Harry M.		Dallas	

*EDITOR'S NOTE: This list is the fourth of a series in which it is hoped to name all those physicians who have been in the Armed Forces during the war just passed and have now returned to Texas to resume civilian practice. The information in this list has been assembled from a variety of sources. While an attempt has been made to secure as complete and as accurate data as possible, we are aware that omissions and errors have been made. Not only for publication in the JOURNAL, but also for the permanent records in the central office of the State Medical Association, we invite and urge correction of and addition to the material here submitted. Note that physicians from each county area are numbered consecutively following those listed in the January JOURNAL; the last number in each section therefore indicates the total physicians returned to that county area. The complete total for Texas named to date (January 26), including the accompanying list, is 752.

†A=Army; N=Navy; U=U. S. Public Health Service.

[1]Formerly of West.

[2]Formerly of Dallas.

[3]Formerly of Fort Worth.

[4]Formerly of Wichita Falls.

NAME	Serv.†	Location	Release Date
Dallas County (Continued)			
91. Still, Oscar W.	A	Dallas	
92. Walborn, Kenneth B.	A	Dallas	
93. Walker, James B.	N	Dallas	
94. Willis, R. S.		Dallas	
Dawson-Lynn-Terry-Gaines-Yoakum Counties			
2. Standifer, L. E.	A	Lamesa	
Ector-Midland-Martin-Howard-Andrews-Glasscock Counties			
5. Williamson, Thomas J.	A	Big Spring[1]	
Ellis County			
3. Harris, Joseph P.	A	Midlothian	Dec., 1945
4. Walker, A. E.		Ferris	
El Paso County			
22. Collins, William A., Jr.	A	El Paso	
23. Cuen, Mario J.	A	El Paso	
24. Curtis, Wickliffe R.	A	El Paso	
25. Feener, Lester		El Paso	
26. Goodloe, Basil		El Paso	
27. Hinton, J. Houston	A	El Paso	
28. Hunter, C. D.		El Paso	
29. Robbins, J. L.		El Paso	
Galveston County			
8. Aves, Frederick H.	A	Dickinson	
9. Barnes, Sam Rankin	A	Galveston	Nov., 1945
10. Guilford, Fred R.	A	Galveston	Sept., 1945
11. Hoeflich, Werner F.	A	U. of T. Galveston[2]	Oct., 1945
12. Leaton, Robert E.	A	Galveston[3]	
13. McMillan, Thomas	A	Galveston	
14. Pierson, Marcus A.	A	Galveston	
15. Quick, David W.	A	Galveston	Oct., 1945
16. Tipton, George W.	A	Galveston	Nov., 1945
17. Tocker, Alfred M.	A	Galveston	Sept., 1945
18. Treadway, James L.	A	Galveston	Oct., 1945
19. Wood, W. R.	A	U. of T., Galveston	
Gray-Wheeler Counties			
3. Bellamy, Russell M.	A	Pampa	
4. Gilliland, James O.	A	Pampa	
Grayson County			
3. Southerland, W. I.	N	Sherman	
4. Truett, Charles	N	Denison	
Gregg County			
10. Van Beber, J. A.	A	Gladewater	
Hale-Floyd-Briscoe-Swisher Counties			
4. Donnelly, Verner J.	N	Plainview	
Hansford-Hemphill-Lipscomb-Roberts-Ochiltree Counties			
1. Sanford, Herbert M.	A	Perryton	
Harris County			
100. Babcock, D. S.	N	Houston	Nov., 1945
101. Billups, J. T.	N	Houston	Nov., 1945
102. Blundell, J. R.	A	Houston	Nov., 1945
103. Bourdon, Lynn L.	A	Houston	Nov., 1945
104. Brener, Lazard S.	A	Houston	Dec., 1945
105. Chandler, Allen	A	Houston	
106. Connor, W. H.	A	Houston	Nov., 1945
107. Cummings, H. W.	N	Houston	Nov., 1945
108. Davis, C. Q.	A	Houston	Nov., 1945
109. Duggan, LeRoy B.	N	Houston	Nov., 1945
110. DuCroz, J. L.	A	Pasadena	Dec., 1945
111. Fowler, Kenneth	N	Houston	
112. Gooch, Frank B., Jr.	A	Houston	Nov., 1945
113. Guthrie, Thomas H.	A	Houston	
114. Knolle, Ben	A	Houston	
115. Knolle, Guy E.	N	Houston	
116. Leach, Charles L., Jr.	A	Houston	
117. Little, A. A.	N	Houston	Dec., 1945
118. McDaniel, Shaw	N	Houston	Dec., 1945
119. McReynolds, I. S.	A	Houston	
120. Mabry, J. D.	N	Houston	Nov., 1945
121. Margraves, Ross D.	N	Houston	Nov., 1945
122. Martin, James R.	N	Houston	
123. Mayfield, J. H.	A	Houston	Nov., 1945
124. Mitchner, J. M.	N	Houston	
125. Mohle, F. D.	A	Houston	Dec., 1945
126. Orr, Guy H.	N	Houston	
127. Robins, William	A	Houston	Dec., 1945
128. Salinger, Alfons	A	Houston	
129. Sears, Ernest S.	A	Houston	
130. Smith, Bert B.	A	Houston	
131. Turboff, S. W.	A	Houston	
132. Youngblood, J. C.	N	Houston	
133. Zionte, M. A.	A	Houston	
Hunt-Rockwall-Rains Counties			
5. Ward, Irvan M.	A	Greenville	

[1]Formerly of Eldorado.

[2]Formerly of Houston.

[3]Formerly of Cleveland, Ohio.

NAME	Serv.†	Location	Release Date
Kaufman County			
3. DeVlaming, William	A	Kaufman	
Lavaca County			
2. Heger, Frank F.	A	Shiner	
3. Strieder, Hugo J.	N	Moulton	
Liberty-Chambers Counties			
3. Griffin, Frank S., Jr.	A	Liberty	Dec., 1945
Limestone County			
3. Cox, Stanley	N	Groesbeck	
Lubbock-Crosby Counties			
8. Mansell, Chris C.	N	Lubbock	
9. Smith, Gerald S.	A	Lubbock	
McLennan County			
10. Burgess, John L.	N	Waco	
11. King, Walter B., Jr.	A	Waco	
12. Simpson, Neill	A	Waco	
13. Trippett, Horace	A	Waco	
Medina-Uvalde-Maverick-Val Verde-Edwards-Real-Kinney-Terrell-Zavala Counties			
2. Dimmit, D. P.	A	Uvalde	
Milam County			
2. Poetter, Henry W.	A	Cameron	
Nacogdoches County			
2. Adams, Clyde	A	Nacogdoches	
Navarro County			
3. Hamill, Dan B.	N	Corsicana	
Palo Pinto-Parker Counties			
4. McCall, James D.		Mineral Wells	
5. Williams, C. R.		Mineral Wells	
Potter County			
10. Blackwell, Ben T.	N	Amarillo	
11. Marclay, David M.		Amarillo	
Rusk County			
6. Parchman, Hugh W.	A	Overton	
7. Ross, Jesse E., Jr.	N	Henderson	
San Patricio-Aransas-Refugio Counties			
3. Jones, L. Bonham	A	Taft	Dec., 1945
Scurry-Dickens-Kent-Garza-Borden-King-Stonewall Counties			
3. Featherston, Elmer W.	A	Swenson	
4. Jacobson, Harry	A	Post	
Shelby-San Augustine-Sabine Counties			
2. Brake, I. F.	A	San Augustine	Feb., 1946

NAME	Serv.†	Location	Release Date
Tarrant County			
35. Brasher, R. V.		Fort Worth	
36. Childs, Tilden L., Jr.	A	Fort Worth	
37. Cochran, J. R.		Fort Worth	
38. Hallmark, J. A.		Fort Worth	
39. Halpin, Frank W.		Fort Worth	
40. Hartnett, Dalton C.	A	Fort Worth	
41. Hawkins, C. P.		Fort Worth	
42. Hewatt, J. W.		Fort Worth	
43. Hulsey, Sim		Fort Worth	
44. Isaacks, Hub E.		Fort Worth	
45. Parsons, W. F.		Fort Worth	
46. Savage, Hugh W.	A	Fort Worth	
47. Sealy, W. Burgess	A	Fort Worth	
48. Siddons, George Y.		Fort Worth	
49. Sumner, Wendell W.		Fort Worth	
Taylor-Jones Counties			
9. Bunkley, Thomas A.	A	Stamford	
10. Hudson, Isaac F.	A	Stamford	Nov., 1945
11. Varner, R. W.	A	Abilene	Dec., 1945
12. Youngblood, John W.		Stamford	Nov., 1945
Tom Green-Coke-Crockett-Concho-Irion-Sterling-Sutton-Schleicher Counties			
5. Tester, Lewis K.	A	San Angelo	Dec., 1945
6. Woodward, Lewis O.	A	San Angelo	Dec., 1945
Travis County			
19. Veith, Richard P.	A	Austin	
Van Zandt County			
1. Estes, Bates	A	Canton	
Victoria-Calhoun-Goliad Counties			
1. Lander, Roy S.	A	Victoria	
Webb-Zapata-Jim Hogg Counties			
4. Malakoff, Morris E.	A	Laredo	
Wharton-Jackson-Matagorda-Fort Bend Counties			
2. Yates, Charles W.	A	Rosenberg	
Wichita County			
9. Powers, William L.	N	Wichita Falls	Nov., 1945
Williamson County			
3. Swanson, Wayland R.	A	Taylor	
Young-Jack-Archer Counties			
2. Harrell, Fred S.	A	Olney	Oct., 1945
3. Price, Robert L.	A	Graham	Jan., 1946

MISCELLANEOUS

COMING MEETINGS AND CLINICS

State Medical Association of Texas, Galveston, May 6-9, 1946. Dr. H. F. Connally, Waco, President; Dr. Holman Taylor, 1404 W. El Paso St., Fort Worth, Secretary.

American Medical Association, San Francisco, July 1-5, 1946. Dr. Roger I. Lee, Boston, President; Dr. Olin West, 535 North Dearborn Street, Chicago, Secretary.

Southern Medical Association. Dr. M. Y. Dabney, Birmingham, Ala., President; C. P. Loranz, Empire Building, Birmingham, Ala., Secretary-Manager.

Southwest Allergy Forum, Houston, April 8-9, 1946. Dr. George W. Owen, Jackson, Miss., Temporary President; Dr. A. H. Braden, 1910 Crawford St., Houston, Secretary.

Texas Association of Medical Anesthetists, Galveston, May 6, 1946. Dr. E. D. Embree, Houston, President; Dr. R. A. Miller, 1415 Nix Professional Building, San Antonio, Secretary.

Texas Association of Obstetricians and Gynecologists, Galveston. Dr. Allen McMurrey, Houston, President; Dr. Julius McIver, 714 Medical Arts Building, Dallas, Secretary.

Texas Chapter American College of Chest Physicians, Galveston, May 6, 1946. Dr. S. E. Thompson, Kerrville, President; Dr. Elliott Mendenhall, Dallas, Secretary.

Texas Club of Internists. Dr. Robert M. Barton, Dallas, President; Dr. Julian C. Barton, 414 Navarro St., San Antonio, Secretary.

Texas Dermatological Society. Dr. Lewis Pipkin, San Antonio, President; Dr. Duncan O. Poth, 1230 Nix Professional Building, San Antonio, Secretary.

Texas Hospital Association, Fort Worth, March 21-23, 1946. Lawrence Payne, Baylor Hospital, Dallas, President; Miss Madelyne Sturdavant, 5709 Velasco, Dallas, Secretary.

Texas Neuropsychiatric Association, Galveston, May 6, 1946. Dr. Titus Harris, Galveston, President; Dr. Fred Rogers, Dallas, Secretary.

Texas Ophthalmological and Otolaryngological Society, Dallas, December, 1946. Dr. C. B. Williams, Mineral Wells, President; Dr. E. D. Dumas, San Antonio, Secretary.

Texas Orthopedic Society. Dr. E. A. Cayo, San Antonio, President; Dr. Edward Smith, Houston, Secretary.

Texas Pediatric Society, Fort Worth, October, 1946. Dr. Max Woodward, Sherman, President; Dr. John E. Ashby, Dallas, Secretary.

Texas Public Health Association. Major Lewis Dodson, C. E., Headquarters Eighth Service Command, Dallas 2, Texas, President.

Texas Radiological Society. Dr. Herman Klapproth, Sherman, President; Dr. R. P. O'Bannon, 650 Fifth Ave., Fort Worth, Secretary.

Texas Railway and Traumatic Surgical Association, Galveston, May 6, 1946. Dr. W. B. Reeves, Greenville, President; Dr. Ross Trigg, First National Bank Building, Fort Worth, Secretary.

Texas Society for Mental Hygiene, Galveston, March 7-8, 1946. Dr. Paul L. Boynton, S. F. A. S. T. C., Nacogdoches, President; Mrs. Elizabeth F. Gardner, 1617 Watchhill Road, Austin 21, Executive Secretary.

Texas Society of Gastro-Enterologists and Proctologists, Galveston, May 6, 1946. Dr. James J. Gorman, El Paso, President; Dr. George M. Underwood, 4105 Live Oak Street, Dallas, Secretary.

Texas Society of Pathologists, Galveston, May 8, 1946. Dr. May Owen, Fort Worth, President; Dr. C. T. Ashworth, Southwestern Medical College, Dallas, Secretary.

Texas State Heart Association, Galveston, May 6, 1946. Dr. Victor E. Schulze, San Angelo, President; Dr. Walter B. Whiting, Wichita Falls, Secretary.

Texas Surgical Society, Temple, April 1-2, 1946. Dr. G. V. Brindley, Temple, President; Dr. Walter Stuck, 1426 Nix Professional Building, San Antonio, Secretary.

Texas Tuberculosis Association. Dr. J. B. White, Amarillo, President; Miss Pansy Nichols, Austin, Executive Secretary.

Third, Panhandle, District Medical Society. Dr. D. D. Cross, Lubbock, President; Dr. George Powers, Amarillo, Acting Secretary.

Fourth District Medical Society, Brady, November, 1946. Dr. H. L. Locker, Brownwood, President; Dr. Glenn H. Ricks, Brady, Secretary.

Fifth and Sixth, Southwest District Society. Dr. Phil A. Bleakney, Harlingen, President; Dr. C. W. Tennison, San Antonio, Secretary.

Seventh, Austin District Society. Dr. Robert B. Morrison, Austin, President; Dr. M. I. Brown, Austin, Secretary.

Eighth, Ninth and Tenth Districts Medical Society. Dr. J. T. Tadlock, Dayton, President; Dr. George W. Waldron, Medical Arts Building, Houston, Secretary.

Eleventh District Society, Jacksonville, March, 1946. Dr. C. B. Young, Tyler, President; Dr. J. M. Travis, Jacksonville, Secretary.

Twelfth, Central Texas, District Society, Corsicana, July, 1946. Dr. Thomas G. Glass, Marlin, President; Dr. H. F. Connally, Jr., Waco, Secretary.

Thirteenth, Northwest, District Society. Dr. A. L. Roberts, Fort Worth, President; Dr. Joe R. Wise, 1212 W. Lancaster, Fort Worth, Secretary.

Fourteenth District Society, Dallas, December 11. Dr. W. C. Morrow, Greenville, President; Dr. A. L. Ridings, Sherman, Secretary.

Fifteenth, Northeast Texas, District Society, October, 1946. Dr. Frank Littlejohn, Marshall, President; Dr. Henry H. Niehuss, Greggton, Secretary.

CLINICS

Dallas Southern Clinical Society, Dallas, March 18-21, 1946. Secretary, 433 Medical Arts Building, Dallas 1.

TEXAS OPHTHALMOLOGICAL AND OTOLARYNGOLOGICAL SOCIETY

Texas Ophthalmological and Otolaryngological Society held its twentieth annual session December 14-15, 1945, in San Antonio at the Gunter Hotel with about seventy-five present. The following scientific program was carried out:

December 14

Carcinoma of the Larynx, Presentation of Cases—A. F. Clark, M. D., and Dan A. Russell, M. D., San Antonio.

Retinal Detachments—F. H. Newton, M. D., Dallas.
Discussion—V. R. Hurst, M. D., Longview; Lt. Col. Brittain Payne, M. C., A. U. S.

The Mastoid. Anatomical and Clinical Consideration—J. D. Dudley Singleton, M. D., Dallas.
Discussion—L. M. Sellers, M. D., Dallas; August J. Streit, M. D., Amarillo.

Neck Abscesses—J. Charles Dickson, M. D., Houston.
Discussion—C. C. Cody, M. D., Houston; Robert E. Parrish, M. D., San Antonio.

Diseases of the Optic Nerve—Frank D. Carroll, M. D., Eye Institute, New York City.

December 15

Retinal Blastoma in Adults—J. F. Schultz, M. D., Houston.
Discussion—Lester H. Quinn, M. D., Dallas; E. M. Sykes, M. D., San Antonio.

The Lymph Pump Mechanism of the Nose and Paranasal Sinuses—J. M. Robison, M. D., Houston.
Discussion—Burbank Woodson, M. D., Temple; Lyle M. Sellers, M. D., Dallas.

Dacryocystitis—August J. Streit, M. D., Amarillo.
Discussion—F. H. Newton, M. D., Dallas; Dan A. Russell, M. D., San Antonio.

Local Use of Penicillin in Otolaryngology—Fletcher D. Woodward, M. D., Charlottesville, Va.

Dr. Fletcher D. Woodward, Charlottesville, Va., and Dr. Frank D. Carroll, Eye Institute, New York City, were speakers at a luncheon December 14, at which Dr. John H. Burleson, San Antonio, presided.

Members of the society were invited to tour the School of Aviation Medicine at Randolph Field or to play golf in the afternoon of December 14. That evening cocktails were served preceding a formal banquet at the Gunter Hotel.

Dr. C. B. Williams, Mineral Wells, was elected president for the coming year, succeeding Dr. M. K. McCullough, Dallas, and Dr. E. D. Dumas, San Antonio, was re-elected secretary. The next meeting will be held in Dallas in December, 1946.

Dr. A. F. Clark was general chairman for local arrangements. Serving with him on committees were the following: general and reception, Drs. Charles J. Boehs, J. H. Burleson, A. N. Champion, A. F. Clark, E. D. Dumas, William D. Gill, O. H. Judkins, W. E. Muldoon, Robert E. Parrish, Belvin Pritchett, Dan A. Russell, E. M. Sykes, T. W. Folbre, W. M. McCurdy, and A. A. Nisbet; assembly room and accessories, Dr. Belvin Pritchett (chairman), Drs. Charles J. Boehs, and William D. Gill; golf, Dr. E. M. Sykes, chairman and Dr. Belvin Pritchett; luncheon, Dr. J. H. Burleson (chairman), Drs. Robert E. Parrish, and A. F. Clark; banquet Dr. A. N. Champion (chairman), Drs. J. H. Burleson, W. E. Muldoon, E. M. Sykes, and O. H. Judkins; entertainment of visiting ladies, Mesdames Dan A. Russell (chairman), Charles J. Boehs, A. N. Champion, A. F. Clark, E. D. Dumas, T. W. Folbre, O. H. Judkins, W. M. McCurdy, W. E. Muldoon, A. A. Nisbet, Robert E. Parrish, Belvin Pritchett, F. H. Rosebrough and E. M. Sykes.

NEW ORLEANS GRADUTE MEDICAL ASSEMBLY

The New Orleans Graduate Medical Assembly, ninth annual meeting, will be held in New Orleans April 1-4, at the Municipal Auditorium. The program will consist of lectures by sixteen outstanding guest speakers, clinics, symposia, clinico-pathologic conferences, round-table luncheon discussions, and technical exhibits. A registration fee of $10 covers all features, including three luncheons. Physicians who plan to attend are invited to register at once with the Secretary, Room 105, 1430 Tulane Avenue, New Orleans 13. Information regarding hotel reservations will be sent upon receipt of registration fee or by request.

HOSPITALS NEEDING INTERNS AND RESIDENTS

Methodist Hospital, Dallas. Capacity 206 beds. C. W. Sensenbach, M. D., Medical Director; (4 interns now).

Brackenridge Hospital, Austin. Capacity 225 beds. J. M. Coleman, M. D., Medical Director; (2 interns, July 1).

All Saints Episcopal Hospital, Fort Worth. Capacity 110 beds. Eva M. Wallace, R. N., Superintendent. Appoved general residency; (2 residents on or before April 1).

RED CROSS ADVISORY BOARD

Appointment of Victor Ehlers, Austin, to an Advisory Board on Health Services to coördinate activities of the American Red Cross in the health field has been announced by Basil O'Connor, national Red Cross chairman. The committee consists of 109 men and women from twenty-five states and the District of Columbia, representing every specialty in the field of health, not only physicians. The first meeting of the Board's executive committee was held in Washington, December 15. The entire board will meet at least once a year.

Among Red Cross departments upon whose programs the new board will advise are: nutrition; nursing; home nursing; nurse's aides; first aid, water safety and accident prevention; medical aspects of home service; hospital service; blood donor; civilian relief; disaster relief; and canteen corps and nutrition aides.

AMERICAN COLLEGE OF SURGEONS SECTIONAL MEETINGS

The American College of Surgeons has resumed its sectional meetings in 1946, with ten two-day meetings scheduled from January through April. During the war only one-day sessions were held, and since only local meetings of most medical groups were possible during the past few years, the College this year extended an invitation to the medical profession at large, medical students, and hospital executives to attend its meetings so that new information might be more widely dispersed.

The meetings announced by the College include Minneapolis, January 28-29; St. Louis, January 31-February 1; Birmingham, Ala., February 8-9; Pittsburgh, March 11-12; Boston, March 18-19; Montreal, March 22-23; Detroit, March 26-27; Salt Lake City, April 8-9; Portland, Ore., April 12-13; and Los Angeles, April 17-18.

Among the subjects scheduled for discussion are treatment of infection by chemotherapy and the antibiotics; injuries to the bile ducts; pre- and postoperative supportive treatment; treatment of open wounds; treatment of osteomyelitis; management of advanced cancer; the care of the veteran; and the reconversion period in the practice of medicine.

SOUTHEASTERN SURGICAL CONGRESS

The Southeastern Surgical Congress will hold its next assembly March 11-13 at the Peabody Hotel in Memphis, Tenn. The medical profession is invited to attend.

A partial list of persons who will participate in the program of the Congress follows: Dr. Conrad G. Collins, New Orleans; Dr. Merrill N. Foote, Brooklyn, N. Y.; Dr. Clarence E. Gardner, Durham, N. C.; Dr. James E. Hemphill, Charlotte, N. C.; Dr. Robert Hingson, Jr., Staten Island, N. Y.; Dr. Arnold Jackson, Madison, Wis.; Dr. Roy R. Kracke, Birmingham, Ala.; Dr. Karl A. Meyer, Chicago; Dr. J. O. Morgan, Gadsden, Ala.; Dr. Curtice Rosser, Dallas; Dr. Harold E. Simon, Birmingham, Ala.; Dr. G. L. Simpson, Greenville, Ky.; and Dr. Horace G. Smithy, Charleston, S. C.

Additional information may be obtained from Dr. B. T. Beasley, Secretary-Manager, 701 Hurt Bldg., Atlanta 3, Ga.

UROLOGY AWARD

The American Urological Association offers an annual award not to exceed $500 for an essay or essays on the result of some specific clinical or laboratory research in urology. The amount of the prize is based on the merits of the work presented, and if the committee on scientific research deems none of the offerings worthy, no award will be made. Competitors are limited to residents in urology in recognized hospitals and to urologists who have been in such specific practice for not more than five years. The selected essay or essays will appear on the program of the American Urological Association, to be held at the Netherland Plaza, Cincinnati, Ohio, July 22-25.

Essays must be in the hands of the Secretary, Dr. Thomas D. Moore, 899 Madison Avenue, Memphis, Tenn., on or before July 1. Full particulars regarding the contest may be secured from Dr. Moore.

EAR, NOSE, THROAT INFECTION

The application of penicillin locally is helpful in the control of acute and subacute infections of the nose, sinuses, throat, and mouth and is of occasional benefit in certain cases of chronic inflammation of the middle ear, according to Fletcher D. Woodward, M. D., and Thomas Holt, M. D., of Charlottesville, Virginia.

"In order to evaluate the local use of penicillin in infections of the ear, nose, and throat," the authors state in the October 27 issue of *The Journal of the American Medical Association*, "a study of a group of patients was begun in February, 1945, for the purpose of taking advantage of the seasonal peak in the incidence of upper respiratory infections. The study continued for three months. During this period approximately 500 patients were treated."

Five hundred units of sodium penicillin per cubic centimeter of salt solution was found to provide the simplest and most effective means of application. A water soluble jelly containing penicillin was useful at times for instillation into the nose at bedtime. The authors noted that to be effective penicillin must be of sufficient concentration and in constant contact with the infected tissues for a considerable time.

However, the usefulness of penicillin in the treatment of the common cold is still undetermined. A study was made of a group of 40 patients who had the early phase of the disease; 36 improved within 48 hours under this treatment. But, the authors add, "acute rhinitis varies widely in intensity and duration of symptoms, and the psychologic effect of a new drug must also be evaluated in one's conclusions. Hence, until penicillin becomes plentiful enough to treat large groups in army camps and industrial organizations, it cannot be said that topical application in the early phase of acute rhinitis will or will not be of value."

PHYSICIANS ART CONTEST AND EXHIBITION

The American Physicians Art Association's 1947 Exhibition, to be held at Atlantic City in conjunction with the centennial session of the American Medical Association, will also be the occasion for the judging of the "Courage and Devotion Beyond the Call of Duty" contest. This contest, in which $34,000 in savings bonds will be awarded, was originally scheduled for the 1946 A. M. A. session but has been postponed one year to give more physicians time to complete their art pieces on the prize subject.

Further information regarding either the 1946 exhibition in San Francisco or the 1947 contest and exhibition in Atlantic City may be secured by writing Dr. Francis H. Rodewill, Secretary-Treasurer of the American Physicians Art Association, Flood Building, San Francisco, Calif., or the sponsor, Mead Johnson and Co., Evansville 21, Ind.

GASTROENTEROLOGY AWARD

Establishment of an annual cash award of $100 and a certificate of merit for the best unpublished contribution on gastroenterology or allied subjects has been announced by the National Gastroenterological Association. Certificates will also be awarded those physicians whose contributions are deemed worthy.

Contestants must be members of the American Medical Association or, if residing outside the United States, of a similar organization in their own country. Entries for the 1946 prize should be 5,000 words or less, typewritten in English, prepared in manuscript form, submitted in five copies, accompanied by an entry letter, and must be received not later than May 1 by the Association, 1819 Broadway, New York 23, N. Y.

The winning contribution will be selected by a board of impartial judges, whose decision will be final. The award will be presented at the annual convention banquet of the Association at the Hotel Pennsylvania in New York City, June 20. Certificates awarded to other physicians will be mailed to them. The Association reserves the exclusive right of first publishing the winning contribution and those receiving certificates of merit in its official publication, *The Review of Gastroenterology.*

A. M. A. COUNCIL REPORTS

COUNCIL ON PHARMACY AND CHEMISTRY

NEW AND NONOFFICIAL REMEDIES

The following additional articles have been accepted as conforming to the rules of the Council on Pharmacy and Chemistry of the American Medical Association for admission to New and Nonofficial Remedies. A copy of the rules on which the Council bases its action will be sent on application.

AUSTIN SMITH, M. D., *Secretary.*

Penicillin (See Supplement to New and Nonofficial Remedies, 1944, p. 18).

The following dosage form has been accepted:

LAKESIDE LABORATORIES, MILWAUKEE

Penicillin Sodium: 100,000 Oxford units in 20 cc.

vials and 100,000 Oxford units in 20 cc. vials packaged with an accompanying 20 cc. vial of isotonic solution of sodium chloride.

Sulfadiazine Sodium (See New and Nonofficial Remedies, 1944, p. 199).

The following additional dosage form has been accepted:

SHARP & DOHME, INC., PHILADELPHIA

Sterile Solution Sodium Sulfadiazine 5% W/V: 50 cc. ampuls. Each 50 cubic centimeters contain sodium sulfadiazine 2.5 Gm. and distilled water q. s.

—J. A. M. A., Sept. 15, 1945.

Globin Insulin With Zinc (See Supplement to New and Nonofficial Remedies, 1944, p. 31).

The following additional dosage form has been accepted:

BURROUGHS WELLCOME & CO., INC., NEW YORK

Globin Insulin with Zinc: 10 cc. Each cubic centimeter contains 40 units; 0.18 per cent W/V cresol as preservative.

—J. A. M. A., Sept. 22, 1945.

Allergenic Preparations (See New and Nonofficial Remedies, 1944, p. 35).

The following extract now stands accepted:

WYETH, INC., PHILADELPHIA

Allergenic Extract: The following extract is marketed in treatment packages of five 1 cc. size cartridge ("Tubex") vials representing graduated concentrations, namely 100, 1,000, 6,000, 20,000 and 20,000 pollen units per cubic centimeter. Also in treatment packages of five 1 cc. size cartridge ("Tubex") vials, each representing 20,000 pollen units per cubic centimeter.

Ragweed Combined (Giant and Short Ragweeds, in equal proportions). The pollen is weighed and extracted with ether. After removal of the ether the material is mixed with the extracting liquid, consisting of a 0.5 per cent sodium chloride solution containing approximately 0.28 per cent of sodium bicarbonate and 0.5 per cent of phenol and covered with toluene. After three days the extract is subjected to Berkefeld filtration and tested for sterility. Standardization is on the basis of pollen units, 1 pollen unit being equivalent to 0.001 mg. of pure pollen.

Menadione (See New and Nonofficial Remedies, 1944, p. 638).

The following dosage forms have been accepted:

SHARP & DOHME, INC., GLENOLDEN, PA.

Tablets Menadione: 1 mg.

Solution Menadione (in peanut oil) 2 mg. per cc.: 1 cc. ampuls.

Sulfadiazine (See New and Nonofficial Remedies, 1944, p. 178).

The following dosage form has been accepted:

MCNEIL LABORATORIES, PHILADELPHIA

Tablets Sulfadiazine: 0.5 Gm.

Thiamine Hydrochloride (See New and Nonofficial Remedies, 1944, p. 608).

The following dosage form has been accepted:

AMERICAN PHARMACEUTICAL CO., INC., NEW YORK

Tablets Thiamine Hydrochloride: 1 mg.

—J. A. M. A., Nov. 3, 1945

Vitamin B Complex Syrup.—A syrup prepared from a concentrated extract of dried brewers' yeast and an extract of corn processed with Clostridium acetobutylicum, with inverted cane sugar 40 per cent w/v and natural flavoring.

Actions and Uses.—Proposed for prophylaxis and treatment of conditions arising from deficiency of the vitamin B complex.

VI-CO PRODUCTS CO., CHICAGO

Vitamin B Complex Syrup: Each 5 cc. contains thiamine hydrochloride 1.5 mg. riboflavin 1.0 mg., pyridoxine hydrochloride 0.5 mg. and nicotinic acid 7.0 mg., with other vitamin B complex factors as extracted from 10 Gm. of dried brewers' yeast.

U. S. Patent 2,193,876 (March 19, 1940; expires 1957).

Theophylline Ethylenediamine (See New and Nonofficial Remedies, 1944, p. 373).

BARLOW-MANEY LABORATORIES, INC., CEDAR RAPIDS, IOWA

Tablets Aminophylline: 0.1 Gm. and 0.2 Gm.

AMERICAN PHARMACEUTICAL CO., INC., NEW YORK

Tablets Aminophylline: 0.1 Gm. and 0.2 Gm. with shellac.

Calcium Levulinate (See New and Nonofficial Remedies, 1944, p. 457).

The following dosage forms have been accepted:

CHEMO PURO MANUFACTURING CORP., LONG ISLAND CITY, N. Y.

Calcium Levulinate: 30 Gm. and 480 Gm. bottles.

CARROLL DUNHAM SMITH PHARMACEUTICAL CO., ORANGE, N. J.

Calcium Levulinate Injection 10% W/V: 1 Gm. in 10 cc.

Bismuth Subsalicylate (See New and Nonofficial Remedies, 1944, p. 236).

The following dosage form has been accepted:

THE SMITH-DORSEY CO., LINCOLN, NEB.

Bismuth Subsalicylate in Oil with Chlorobutanol: 50 cc. vials. A suspension of bismuth subsalicylate in peanut oil containing in each cubic centimeter bismuth subsalicylate 0.13 Gm. with 3 per cent chlorobutanol added.

—J. A. M. A., Nov. 17, 1945.

Antivenin (Latrodectus Mactans).—An antitoxic serum prepared by immunizing horses against the venom of the black widow spider (Latrodectus mactans).

Actions and Uses.—This material, which is standardized on the basis of its ability to neutralize the venom of the black widow spider when the two are injected simultaneously in mice, is claimed to be indicated in the treatment of patients suffering from symptoms due to bites inflicted by the black widow spider (Latrodectus mactans). Prior to use, tests for serum sensitivity should be made, test material consisting of 1:10 dilution of isotonic solution of normal equine serum, which is injected intradermally. If there is a positive skin reaction, an eye test consisting of placing a few drops of the test material on the conjunctiva and watching for ten minutes should be undertaken. If there is a negative result from the skin test, the therapeutic serum can be administered. However, if there is a positive reaction in the eye following the positive skin test, serum therapy should be avoided. If there is a positive skin test and a negative eye test, the individual may be desensitized before administering the serum. The amount of material injected into the skin for the intradermal test should be not more than 0.2 cc. of the test material. The result can be evaluated in ten minutes, a positive reaction consisting of an urticarial wheal surrounded by a zone of erythema.

Associated treatment includes hot plunge baths, intravenous injection of magnesium sulfate, 20 cc. of 10 per cent solution, or intravenous injection of 10 per cent calcium gluconate. Barbiturates may be used for restlessness. Apparently nothing is gained by local treatment at the site of the bite.

Dosage.—An injection of 2.5 cc. of serum is administered intramuscularly.

SHARP & DOHME, INC., PHILADELPHIA

Lyovac Antivenin (Latrodectus mactans): 'Vacule'

ampul-vial containing a sufficient amount of lyophilized antivenin to yield 2.5 cc. of restored double concentrated antivenin with phenol 0.35 per cent as a preservative; packaged with a 2.5 cc. ampul of distilled water and 1 cc. vial of normal horse serum (diluted 1:10) as test and desensitizing material.

A lyophilized antitoxic serum prepared by injecting horses with venom of black widow spiders (Latrodectus mactans).

A process of lyophilization consists in the following: The antivenin in specially designed final containers is immersed in a freezing mixture to congeal the substance rapidly with the least molecular rearrangement. The container is then subjected to a high vacuum to accomplish dehydration, which is continued until the residual moisture content is less than 1 per cent, and finally sealed under vacuum.

Pyridoxine Hydrochloride (See New and Nonofficial Remedies, 1944, p. 618).

The following dosage form has been accepted:

ENDO PRODUCTS, INC., RICHMOND HILL, N. Y.

Solution Pyridoxine Hydrochloride: 1 cc. ampuls of 25 mg. and 50 mg. per cc. and 10 cc. vials of 50 mg. per cc.

Sulfathiazole (See New and Nonofficial Remedies, 1945, p. 202).

The following dosage form has been accepted:

VOGEL LABORATORIES, MOHEGAN LAKE, N. Y.

Emulsion Sulfathiazole 5% and 10% Sterilized: 50 cc. and 200 cc bottles. A 5 per cent or 10 per cent suspension of sulfathiazole in an emulsion of beeswax, liquid petrolatum, triethanolamine and water.

Staphylococcus Toxoid (See New and Nonofficial Remedies, 1945, p. 565).

The following dosage form has been accepted:

AYERST, MCKENNA & HARRISON, LTD., NEW YORK

Staphylococcus Toxoid: 3 cc. vials containing in each cubic centimeter the toxoid derived from 20,000 necrotizing doses of toxin. Preserved with 1:20,000 merthiolate.

—J. A. M. A., Dec. 1945.

Penicillin (See New and Nonofficial Remedies, 1945, p. 214).

The following additional dosage forms have been accepted:

MERCK & CO., INC., RAHWAY, N. J.

Penicillin Sodium: Vials containing 200,000 Oxford Units.

Penicillin Calcium: Vials containing 200,000 Oxford Units.

Sulfadiazine (See New and Nonofficial Remedies, 1945, p. 185).

The following dosage form has been accepted:

VOGEL LABORATORIES, MOHEGAN LAKE, N. Y.

Emulsion Sulfadiazine 5% Sterilized: 50 cc. and 200 cc. bottles. A 5 per cent suspension of sulfadiazine in an emulsion of beeswax, liquid petrolatum, triethanolamine and water.

Diphenylhydantoin Sodium (See New and Nonofficial Remedies, 1945, p. 528).

The following dosage form has been accepted:

PREMO PHARMACEUTICAL LABORATORIES, INC., NEW YORK

Capsules Diphenylhydantoin Sodium: 0.03 Gm. and 0.1 Gm.

Theophylline Ethylenediamine (See New and Nonofficial Remedies, 1945, p. 388).

The following additional dosage form has been accepted:

ERNST BISCHOFF COMPANY, INC., IVORYTON, CONN.

Solution Aminophylline: Ampuls 0.24 Gm. in 10 cc. and 0.48 Gm. in 2 cc.

—J. A. M. A., Dec. 29, 1945.

THE ADDITION OF SALT TO DRINKING WATER

The following statement has been authorized for publication by the Council on Pharmacy and Chemistry.

A number of preparations containing sodium chloride have been made available commercially for distribution during hot weather to office employees, industrial workers and others. Some of the products are simple tablets containing sodium chloride, others have enteric coating to permit passage of the material into the intestine before disintegration occurs, and still others contain additional substances such as minerals and vitamins. All are intended to provide sodium chloride and other factors to combat the harmful effects of excessive heat, exercise and sweating.

The need for the addition of vitamins, salts other than sodium chloride and minerals to salt tablets does not have sufficient evidence to justify their routine use until more satisfactory evidence is provided. They can therefore be dismissed from the casual prescribing practice.

However, there is strong evidence to support the administration of additional amounts of sodium chloride to the diet of those subject to strenuous exercise and excessive perspiration. Normally a person leading a sedentary life does not need salt in addition to the amount ordinarily placed in food. If copious sweating occurs, such an individual may require additional salt. Excessive perspiration is frequently encountered in those leading a strenuous physical life and may even occur during more moderate temperatures. However, such sweating entails loss of both water and salt, although the loss of salt varies with the amount of sweating and with conditions of acclimatization of the individual. Under special conditions man may become acclimated to hot weather, and work has shown that individuals exposed continuously to hot weather excrete less salt in their urine, compensating thereby for the loss of salt by sweat.

Sweat contains from 0.2 to 0.3 per cent, perhaps even up to 0.5 per cent, of sodium chloride. If a person perspires profusely considerable salt will be lost; for example, an individual might lose from 10 to 15 Gm. of salt. A man performing heavy work may lose a quart of sweat per hour. At the same time the chlorides in the blood decrease, and even though water is drunk it is not retained in the body and the body becomes dehydrated. Drinking too much water in the presence of dehydration created by loss of salt in water can cause water intoxication.

Under ordinary conditions the appetite or hunger for salt regulates the intake. A simple criterion used by many to judge the amount of salt needed is the amount of water drunk and excreted per day. When the total water intake is under 1 gallon per day the amount of salt in the usual normal diet (about 16 Gm.) is claimed to be adequate to cover salt losses by sweating, but with water intake above 1 gallon usually more salt is needed. However, one Council consultant has found that in profuse sweating neither thirst nor salt hunger is a reliable guide. He and his associates found that rats and persons select salt and water so that a 0.6 per cent salt solution is ingested. The same investigator advocates drinking a 0.2 per cent salt solution when profuse sweating occurs, such as when a man performs heavy work. On the other hand, the man who performs light work probably needs no more salt than can be obtained in the ordinary diet. If additional amounts of salt are

required they can be obtained by the use of well salted foods.

When Boulder Dam was being built, considerable enthusiasm was aroused concerning the supplying of additional amounts of salt, which compensated for the amount lost by the body and at the same time caused the men to drink more water. Smelters, iron workers and others who work in the presence of great heat have apparently been successfully given salted water to prevent heat cramps.

Symptoms of heat exhaustion and heat cramps are commonly associated with a salt deficit. Frequently victims suffer from severe cramps, often localized in the abdomen, the condition apparently being brought on by drinking large amounts of water at a time when the loss of sodium chloride from the body is excessive. The condition can be treated at once by the intravenous injection of sodium chloride solution, but it can be prevented by maintaining an adequate salt intake with the water. So far as is known, no harmful effects follow the use of such salt water if it is properly prepared, although the use of salt in tablet form may irritate the stomach and cause nausea and vomiting and other disturbances in some persons. The amount of salt taken should be adjusted to actual need and, as is known, this need will vary with exercise and acclimatization. In areas where periods of hot weather are broken by cooler weather or where people are subject to strenuous exercise only at periodic intervals, the need for salt supplement may exist only during these special periods, and this need may become less after the people become acclimatized. There is such great variance among different individuals according to their physiologic adjustments that it seems best to provide these persons with a 0.1 to 0.2 per cent drinking water solution when a need for extra salt seems indicated. Some may easily be satisfied merely by the addition of salt to their food. A 0.1 per cent solution may be made by dissolving about 1 Gm. of sodium chloride in each quart of water, or about 1 Gm. per liter.—J. A. M. A., Sept. 8, 1945.

Preparations Exempt from Council Consideration

The following report has been adopted by the Council for publication.

The following official preparations have been declared exempt from Council consideration for inclusion in New and Nonofficial Remedies, as their actions, uses and nature are sufficiently well understood by physicians not to require such inclusion.

This list has been adopted for publication so that it may be brought to the attention of all manufacturers and other interested groups. From time to time there may be added other drugs, the names of which will also be published.

Iron and Ammonium Citrates
Ferrous Sulfate
Calcium Gluconate
Antimeningococcic Serum
Liver and Stomach Preparations included in U. S. P.
Digitalis Preparations included in U. S. P.
Acetylsalicylic Acid
Caffeine with Sodium Benzoate
Carbon Dioxide
Oxygen
Oxygen-Carbon Dioxide Mixtures
Chlorinated Paraffin (Chlorocosane)
Cinchophen
Neocinchophen
Dextrose Solution
Sodium Chloride Solution
Isotonic Solution of Three Chlorides
Sodium Citrate
Sodium Biphosphate
Magnesium Sulfate
Trioxymethylene (Paraformaldehyde-U. S. P. X.)
Methylene Blue
Quinine and Urea Hydrochloride
Salicylic Acid
Sodium Salicylate
Natural Oil of Sweet Birch (Methyl Salicylate)
Penetobarbital Sodium
Papaverine Hydrochloride
Emetine Hydrochloride
Totaquine
Tribasic Calcium Phosphate
Magnesium Trisilicate
Tribasic Magnesium Phosphate
Ichthammol Preparations
Strophanthin

—J. A. M. A., Dec. 8, 1945.

LIBRARY NOTES

The package library consists of collections of reprints and other periodical material on various subjects, prepared for lending to members of the Association. Requests for packages should be addressed "Library, State Medical Association of Texas, 1404 W. El Paso Street, Fort Worth 3, Texas." Twenty-five cents in stamps should be enclosed with the request to cover postage and part of the expense of collecting the material. Only one package may be borrowed at a time, and packages are allowed to remain in the hands of the borrower for 14 days.

Package Service

Packages were mailed from the Library of the State Medical Association to the following during January:

Dr. P. L. Allen, Weatherford—*Infants, feeding* (5 articles); *Peptic Ulcer* (4 articles); *Penicillin* (4 articles); *Gonorrhea* (5 articles).

Dr. F. Ray Black, Huntsville—(2 journals).

Capt. Herbert M. Levenson, Wichita Falls—*Pancreatitis, complications and sequels* (11 articles).

Dr. Herbert E. Hipps, Waco—*Extremities, blood supply* (17 articles).

Dr. R. L. Powers, San Angelo—*Surgery, plastic* (14 articles).

Dr. I. F. Cannon, Mart—(1 journal).

Dr. R. F. Shaw, Henderson—*Blood groups* (12 articles).

Dr. Charles Mims, Mission—(2 journals).

Dr. D. R. Tompkins, Refugio—*Blood, groups* (9 articles).

Dr. J. T. Krueger, Lubbock—*Fistula, gastro-jejuno-colic* (11 articles).

Dr. V. A. Black, Wharton—*Retina, detached* (11 articles); *Jaw-Winking Phenomenon* (5 articles).

Dr. Fred W. Standefer, Lubbock—*Coronary Vessels, occlusion* (19 articles).

Dr. Curtis Atkinson, Wichita Falls—*Medicine, progress* (14 articles).

Dr. Ilse Mannheimer, Seguin—*Erythroblastosis, fetal* (13 articles); *Tetanus, neonatorum* (2 articles).

Dr. J. H. Vaughan, Amarillo—*Mouth, cancer* (15 articles).

Dr. Hubert Seale, Abilene—(6 journals).

Dr. Ernestine Smith, Amarillo—*Urination, incontinence* (7 articles); *Diabetes Insipidus* (3 articles); *Varicose Veins, therapy* (13 articles).

Mr. Hobart Huson, Refugio—*Medicine, history* (2 articles).

Dr. F. R. Rugeley, Wharton—(1 journal).

Dr. Thomas M. Johnson, Del Rio—*Cancer* (5 articles); *Syphilis* (4 articles); *Tuberculosis* (4 articles); *Venereal Disease* (1 article).

Dr. Neill Simpson, Waco—*Migraine, histamine therapy* (5 articles).

Dr. D. E. Packard, Kerrville—*Syphilis, penicillin therapy* (10 articles).

Dr. F. B. Malone, Lubbock—*Ethics, medical* (7 articles).

Dr. Kenneth R. Flamm, Amarillo—*Sterility* (29 articles).

Dr. M. W. Caskey, Wichita Falls—*Anaphylaxis and Allergy, therapy* (6 articles) .

Dr. E. A. Rowley, Amarillo—*Psychiatry, history* (5 articles).

Dr. J. H. Jernigan, Childress—(1 journal).

Dr. A. G. Barsh, Lubbock—*Duodenum, diverticula* (15 articles).

Dr. F. T. McIntire, San Angelo—(1 journal).

Dr. John D. Peticolas, El Paso—*Liver, cirrhosis* (20 articles).

Dr. E. Spier, El Paso—(1 journal).

Dr. W. B. Whiting, Wichita Falls—(2 journals).

Dr. G. S. Smith, Lubbock—*Food, allergy* (17 articles).

Dr. Fred Harrell, Olney—*Testes, undescended* (10 articles); *Veins, popliteal* (2 articles).

Dr. John S. Bagwell, Dallas—*Thyroid, hyperthyroidism* (15 articles).

Dr. Oscar Huff, Pampa—*Uterus, cancer* (16 articles).

Dr. M. C. Overton, Lubbock—*Erythromelalgia* (5 articles).

Dr. W. R. Snow, Abilene—*Gynecology, radiotherapy in* (8 articles).

Mrs. W. A. Patterson, Lampasas—*Cancer* (8 articles).

Dr. A. W. Brazda, Ranger—*Syphilis, serodiagnosis* (11 articles).

Capt. M. E. Jacobson, Amarillo—*Tropical Diseases* (22 articles).

Dr. John Simon, Jr., Fort Worth—*Mental Diseases, therapy* (7 articles).

ACCESSIONS

New York, Columbia University Press—Lawton, editor: New Goals for Old Age.

Baltimore, Williams & Wilkins Company—Best and Taylor: The Physiological Basis of Medical Practice, ed. 4.

SUMMARY

REPRINTS RECEIVED, 482.	LOCAL USERS, 37.
JOURNALS RECEIVED, 178.	BORROWERS BY MAIL, 42.
ITEMS CONSULTED, 212.	PACKAGES MAILED, 53.
ITEMS TAKEN OUT, 121.	ITEMS MAILED, 445.

TOTAL ITEMS CONSULTED AND MAILED, 778.

MOTION PICTURE LENDING LIBRARY

Motion picture films on medical subjects, 16 mm., both silent and sound, some in color, and suitable for either medical or lay audiences, are available for loan to county medical societies, hospital staffs, or individual physicians, on request. Borrowers will be required to pay only the cost of shipment of the films, by express, with insurance, and for any damage to films while in the hands of the borrower.

Requests for films should be addressed to "Motion Picture Lending Library, State Medical Association of Texas, 1404 West El Paso Street, Fort Worth 3, Texas." A list of available films, with descriptions, will be furnished on request.

The following motion picture films were loaned by the Motion Picture Lending Library of the State Medical Association during January:

Appendicitis in Childhood (Available through the courtesy of Mead Johnson & Company)—Ector-Midland-Martin-Howard-Andrews-Glasscock Counties Medical Society, Big Spring, and Malone and Hogan Clinic Hospital, Big Spring.

Breech Extraction with Forceps (Available through the courtesy of Mead Johnson & Company)—St. Joseph's School of Nursing and Hospital Staff, Fort Worth.

Goodbye, Mr. Germ (Available through the courtesy of the Texas Tuberculosis Association)—Preschool Mother's Club, Fort Worth.

Immunization (Available through the courtesy of Lederle Laboratories)—Premedical Club, Lamar College, Beaumont.

Premature Infant, the Care of (Available through the courtesy of Mead Johnson & Company)— St. Joseph's School of Nursing & Hospital Staff, Fort Worth.

Roentgen Pelvimetry (Available through the courtesy of Mead Johnson & Company)—St. Joseph's School of Nursing and Hospital Staff, Fort Worth.

NEWS

Contributions to this department will be appreciated. News should be of general medical interest, such as public health activities, new hospitals, personal items of more than local value, etc. News for a particular number of the JOURNAL should be in the hands of the Editor not later than the fifteenth of the preceding month.

Undulant Fever in Camp County has caused the Camp County Medical Society to recommend that all dairy cattle in the county be tested for Bang's disease and tuberculosis. A number of cows belonging to local dairymen have already been tested and found to be diseased. The Society has insisted that permits should be issued to dairymen only after their cows have been tested and found undiseased, and hopes the city council of Pittsburg will make such a practice mandatory, the Pittsburg *Gazette* states.

A **Tuberculosis Hospital for Smith County** is being planned by the Smith County Tuberculosis Association, informs the Tyler *Telegraph*. The Tuberculosis Association is requesting the aid of the Smith County Medical Society in determining what equipment would be needed for a fifty-bed hospital and in procedures necessary to secure equipment from surplus war properties. An eight-acre site for the proposed $100,000 building has already been purchased from the proceeds of tuberculosis seal sales, and the Tyler Lions Club is coöperating in a drive for construction of the hospital, which would be financed by a county bond issue.

Honor Was Paid the Medical Profession by members of the Abilene chapter of the National Secretaries Association when its members gave a dinner for officers of the Taylor-Jones Counties Medical Society and staffs of the Hendrick Memorial and St. Ann Hospitals in the Victory Room of the Hotel Windsor on December 13. Dr. Virginia Boyd, Abilene, was guest speaker. The toastmaster, Miss Mary Pence, gave a history of medicine, and an educational film on tuberculosis was shown. Roll call was answered with current events concerning medicine. The medical theme was carried out into the decorations by a centerpiece consisting of a miniature hospital with a doctor and nurses standing nearby.—*Abilene Reporter-News.*

The Philips Clinic and Hospital, Greenville, has been moved to new quarters, states the Greenville *Herald.* Owned and operated by Dr. W. P. Philips, the new building is modernly equipped. Twenty large rooms for patients are provided, as well as facilities for examination, operation, laboratory work, nurses' quarters, kitchen, and dining room. Dr. Charles H. Roadman, on terminal leave from the Army Air Corps, will be associated with Dr. Philips.

Fire Destroyed the Waskom State Line Clinic building on December 5, informs the Marshall *News-Messenger*. The fire spread so rapidly that fire department efforts were directed primarily toward protecting adjoining property. Dr. H. H. Vaughn and Dr. D. B. Daniels for more than five years had operated the clinic in a building owned by Mrs. Ralph McAllister, Nacogdoches. Damages to the building were estimated at $4,000 and to the contents at $8,000. The loss was partially covered by insurance. Dr. Vaughn indicated that temporary offices would be established in Waskom immediately.

The Menninger Foundation, a nonprofit corporation organized under the laws of the State of Kansas, on January 1 acquired The Menninger Clinic (previously a partnership) and The Menninger Sanitarium Corporation, Topeka, Kans.

The Judson L. Taylor Foundation, of Houston, founded in memory of the late Dr. Taylor to provide fellowships for young surgeons, lectures, and awards for outstanding achievements in surgery, is being administered by the following trustees: Drs. E. W. Bertner, H. J. Ehlers, E. L. Goar, Fred R. Lummis, and Edward T. Smith, and Messrs. John P. Bullington and Winston Carter. Terms of the Foundation trust agreement provide that the board of directors shall include five physicians, one businessman, and one attorney, according to the Houston *Chronicle*.

Chicago Clinical Conference.—The Chicago Medical Society's Annual Clinical Conference will be held at the Palmer House, Chicago, March 5-8, 1946. All physicians are invited to attend the conference and hear outstanding specialists from various sections of the country in this second conference sponsored by the Chicago Society, the first one having been held in 1944.

Fort Worth Food Handling School.—Beginning in January, the Fort Worth City Schools, through the Technical Institute, and the Department of Public Health and Welfare are resuming classes in food handling and public health as a continuous program. Similar classes were first organized in February, 1941, as the second such school in the United States, and more than 1,000 received the full course of training before the turn-over and other difficulties in employment caused by World War 2 made continuation of the classes impractical.

All classes, which are open to the public and are intended for the housewife and domestic help as well as for employees of public eating places, consist of a series of six instruction periods of two hours each. Bacteriology, communicable diseases, medical zoology, foods, disinfection and sterilization, and personal hygiene and sanitation are discussed. Upon completion of the entire training period each person receives a food handlers certificate and is entitled to wear an emblem certifying his qualifications as a food handler. In addition, all establishments that serve food and drink for public consumption are given awards for display purposes when all employees of that place of business have completed the food handlers course.

The Hendrick Memorial Hospital, Abilene, has elected new staff officers for the coming year, according to the Abilene *Reporter*. Dr. William R. Snow was named chairman; Dr. Guy L. Patillo, vice-chairman; and Dr. J. C. Duff, of Anson, secretary. Executive committeemen are Dr. W. B. Adamson and Dr. J. P. Bridges, both for two-year terms, and Dr. C. E. Adams and Dr. Jack A. Crow, both for one-year terms.

Retiring officers are Dr. O. W. Little, chairman; Dr. L. F. Johnson, vice-chairman; Dr. George D. Thurman, secretary; Dr. T. Wade Hedrick, Dr. Erle Sellers, Dr. Virginia H. Boyd, Dr. W. A. V. Cash, and Dr. B. F. Rhodes, executive committee members.

Ashburn General Hospital (McKinney) supplies and property were frozen in December by Headquarters of the Eighth Service Command, states the Celina *Record*. The Army hospital was to be taken over by the Veterans Administration about January 15, and all property in the medical department was to be held for use by that agency. Southwestern Medical Foundation will supply the medical staff for the hospital.

New Doctors Office Building for Houston.—Memorial Hospital, Houston, will erect a $1,000,000 doctors office building, according to plans announced recently at the annual meeting of the staff and board of directors, informs the Houston *Chronicle*. The proposed building will be erected either in the same block as the hospital or across the street. The office building will be constructed upon completion of a nurses building and eight-story addition to the hospital, the total building program to cost in excess of $3,000,000. It was also announced at the meeting that the school of nursing to be housed in the new nurses building will be named "Lilly Jolly School of Nursing" in honor of Mrs. Robert Jolly, for thirty-four years head of the Memorial School of Nursing.

The staff elected Dr. Abbe A. Ledbetter president, Dr. J. G. Heard vice-president, and reelected Dr. J. T. Billups secretary.

The Hotel Dieu Hospital, El Paso, medical staff has elected officers as follows: Dr. S. P. Rogers, president; Dr. Erich Spier, vice-president; Dr. J. D. Martin, secretary-treasurer; Dr. Russell Holt, chief of the surgical division; and Dr. T. E. Scott, chief of the medical division.—*El Paso Times.*

Baylor University.—Dr. L. A. Calkins, professor of obstetrics and gynecology at the University of Kansas, Kansas City, Kan., addressed students at Baylor University College of Medicine early in December. He also spoke at a dinner given in his honor by obstetricians and gynecologists of Houston, the Houston *Post* reports.

Southwestern Medical College.—Six additional trustees have been named for the Southwestern Medical Foundation, informs the Dallas *News*. The announcement was made by Dr. E. H. Cary, president, who indicated that these additions bring the membership of the board to the maximum number of sixteen allowed by the charter granted in 1939. Elected to membership upon nomination by Karl Hoblitzelle, Nathan Adams, and R. L. Thornton are George L. McGregor, president of the Dallas Power and Light Company; J. B. Adoue, Jr., president of the National Bank of Commerce; George B. Dealey, chairman of the board of the Dallas *Morning News;* Tom C. Gooch, president of the *Daily Times Herald;* C. F. O'Donnell, president of the Southwestern Life Insurance Company; and Dr. Gilbert E. Brereton, immediate past-president of the Dallas County Medical Society. In nominating Dr. Brereton the Foundation created a new policy whereby the retiring president of the Dallas County Medical Society will be eligible for membership on the board for a one-year period following his retirement from office. Serving on the board with Dr. Cary and the six new members are Mr. Hoblitzelle, chairman of the executive committee; Harold B. Sanders, general counsel; Herbert Marcus, treasurer; Mr. Adams, Mr. Thornton, Fred F. Florence, D. A. Little, E. P. Simmons, and Dr. Frank A. Selecman. Jesse Jones and T. O. Walton are honorary trustees.

Two substantial gifts to the Southwestern Medical College were announced during December. The Braniff Foundation donated $100,000 for research laboratories and the Hoblitzelle Foundation contributed $125,000 to purchase land on which to erect the College's permanent building, states the Oak

Cliff *Tribune*. The Braniff Foundation, established in 1943 to advance educational, charitable, and religious institutions and to aid in the promotion of systems of scientific research, is headed by Tom E. Braniff, president of Braniff Airways. A portion of the permanent building of the College will be named the Braniff Research Laboratories and will house the research work of Drs. Arthur Grollman, Warren Andrew, S. Edward Sulkin, and Tinsley R. Harrison. The Hoblitzelle Foundation was established in 1942 by Karl Hoblitzelle, president of the Interstate Circuit, Inc., and chairman of the board of directors of the Republic National Bank of Dallas, who is also a charter member of the board of trustees of the Southwestern Medical Foundation. Announcement of the recent gift, which will be a memorial to the late Mrs. Esther Thomas Hoblitzelle, wife of Karl Hoblitzelle, was made by Dr. Humphrey Lee, president of the Foundation.

Appreciation of Southwestern Medical College for the coöperation of the Medical Service Society of Dallas, composed of Dallas representatives of various pharmaceutical houses, was expressed at a luncheon December 15 at which Dr. E. H. Cary, president of the Foundation, presented a bronze plaque to W. Brock Wright, president of the Society. The Society adopted the medical library of Southwestern Medical College as a project and has donated many valuable volumes to the collection. In addition, during the recent drive to raise a $1,300,000 operating fund for the College, the Medical Service Society exceeded its quota of $18,500 by more than $20,000. In presenting the award, Dr. Cary praised the group for its outstanding service to medicine in Dallas.

Dr. C. Sidney Burwell, dean of Harvard Medical School, visited the Southwestern Medical College during January as a visiting professor of medicine, according to the Dallas *News*. His visit was made possible through a grant of Ray Hudspeth, San Angelo, to the Southwestern Medical Foundation to bring outstanding educators and scientists to the College for short periods of instruction to the faculty and students. Dr. Burwell, who is noted for his research in heart diseases, made a public address and also spoke to the Dallas Salesmanship Club.

Dr. Gladys J. Fashena, of the Southwestern Medical College Department of Pediatrics, is the recipient of a grant from the Life Insurance Medical Research Fund. Grants totaling $126,000 to be used for research into the causes of cardiovascular diseases have been made to the medical schools of six universities. The Fund, established last fall by 147 life insurance companies, made the grants upon the recommendation of a medical advisory committee headed by Dr. Francis G. Blake, dean of Yale University School of Medicine, and the approval of the board of directors. The grants this year are the first made under the Insurance Fund and total the largest amount to be devoted in any one year to research in the cardiovascular field.

University of Texas.—Dr. Chauncy D. Leake, vice-president and dean of the University of Texas School of Medicine, is urging the mayor, the Chamber of Commerce, and a planning group in Galveston to attack the problem of adequate housing for faculty and students, additional recreational facilities for them, and higher public health standards for Galveston. Expressing regret that in a recent election a bond issue to fill the east end flats failed of passage and pointing out that no plan of privately financing the project has been advanced, Dr. Leake declares that unless steps are taken to provide decent housing for faculty members it will be impossible to maintain a first-class staff at the Medical School. Dr. Leake also points to the need for some type of student union on the campus. His final plea is for Galveston to set an example in public health and sanitation by providing a tuberculosis hospital; ridding the city completely of rats, flies, and mosquitoes; establishing proper garbage and sewerage disposal; enforcing sanitary cleanliness of eating places, alleys, wharves, and buildings; and providing fully for sanitary control under the direction of a first-class full-time health unit, according to the Galveston *Tribune*.

Appointment of a Chamber of Commerce Medical College committee to serve as a liaison group between the Medical Branch of the University of Texas and Galveston business interests was authorized at the regular meeting of the board of directors of the Chamber of Commerce December 7. The purpose of this committee, to be appointed by the president, will be to offer the College the full coöperation of the city's business men in the furtherance of its program and to assist in all phases of the Medical Branch, reports the Galveston *Tribune*.

Harold Blum, Ph. D., of the U. S. Public Health Laboratory, Bethesda, Md., conducted a special conference on the influence of sunlight on carcinogenesis at the Univerity of Texas School of Medicine January 8. Dr. Blum has been awarded a Guggenheim fellowship for the study of thermodynamic factors in evolution.

The Lilly Research Laboratories, Indianapolis, Ind., have granted $2,500 to the University of Texas Medical Branch to establish a training fellowship in tissue culture, with special reference to the reticuloendothelium system. The grant will be administered under the direction of Dr. Charles M. Pomerat, professor of anatomy and director of the Tissue Culture Laboratory.

The National Foundation for Infantile Paralysis, Inc., has made a grant of $3,500 to the University of Texas Medical Branch to support the studies of Dr. A. Packchanian on virus transmission in small animals in order to try to devise a rapid diagnosis procedure and to assist in screening tests in therapy. Dr. Packchanian is director of the Laboratory of Microbiology.

The Galveston State Psychopathic Hospital, under the direction of Dr. Jack Ewalt, professor of neuropsychiatry, has been reopened for the diagnosis and management of acute cases of mental disorder. The hospital was formerly under the direction of the State Board of Control but was transferred to the University of Texas Medical Branch by legislative action. The bed capacity has been increased from 80 to 120. The hospital furnishes special facilities for teaching and research in neurology and psychiatry.

Dr. Morris Pollard has been appointed assistant professor of preventive medicine and public health to take charge of teaching and research in virus disease at the University of Texas School of Medicine. He organized and directed the virus laboratory of the Army's Eighth Service Command.

The John and Mary R. Markle Foundation has made a $4,000 grant to aid studies on the chemotherapy of malaria directed by Dr. Wendall Gingrich, of the Laboratories of Bacteriology and Parasitology at the University of Texas School of Medicine. An additional $6,750 has been donated by the New York Foundation to support studies on Rickettsial disease under the direction of Dr. Ludwik Anigstein and Dr. R. W. Strandtmann, of the Department of Preventive Medicine.

The Winthrop Chemical Company, of New York, has made a grant for the study of new anesthesia under the direction of Dr. George Emerson, professor of pharmacology, University of Texas School of Medicine.

Cancer research at the University of Texas Medical Branch under the direction of Dr. W. A. Selle, professor of physiology, has received a grant from

the International Cancer Research Foundation, Philadelphia.

The gynecologic survey of women in Texas State Institutions, which is being organized under the direction of Dr. Willard R. Cooke, and Dr. John W. Weaver, both of the staff of the Department of Obstetrics and Gynecology at the University of Texas School of Medicine, with the coöperation of the State Board of Control, has received the support of the Lilly Research Laboratories, Indianapolis, Ind., by a three-year grant of $20,000.

Military Personals

Lieut. Comdr. Howard O. Smith, now practicing in Marlin, was commended by Admiral C. W. Nimitz for meritorious service as a gastro-intestinal and general surgeon aboard a Navy hospital ship. The citation indicated that Commander Smith displayed "unusual zeal in his devotion to duty, and exhibited physical endurance and fortitude to an inspiring degree. His outstanding skill, knowledge, and ability were materially responsible for the alleviation of pain and suffering and were instrumental in saving the lives of many men who otherwise would have died of shock or other disabling conditions."

Capt. Emil P. Zarsky, formerly of Refugio, has been awarded the Silver Star for gallantry in action. After notification that two men had been seriously wounded by stepping on a mine the citation states that Captain Zarsky, without regard for his personal safety, proceeded through the mine field to the scene of the accident, forbidding any one else but one officer and one enlisted man to accompany him because of the danger.—*J. A. M. A.*

Personals

Dr. A. M. Long, Valley Mills, was recently elected chairman of the State Board of Education, according to the Fort Worth *Star-Telegram.*

Dr. R. E. Henderson, Athens, has been appointed District Deputy Grand Master of the Seventeenth Masonic District of the Grand Lodge of Texas, the Athens *Review* reports. Dr. Henderson succeeds *Dr. R. H. Hodge,* also of Athens.

Dr. G. V. Brindley, Temple, Councilor of the Twelfth District of the State Medical Association, has been elected a member of the Mary Hardin-Baylor College (Belton) board of trustees, according to the Temple *Telegram.*

Dr. John G. Marsh, recently appointed as county health officer of Harrison County, has resigned to take postgraduate work in surgery, informs the Marshall *News-Messenger.* Dr. Marsh expects to resume practice in Marshall after completing the special training. Prior to accepting the county post, Dr. Marsh had been plant surgeon and toxicologist at Longhorn Ordnance Works, Karnack, and had also practiced in Longview.

Dr. Elva A. Wright, founder and president of the Houston Anti-Tuberculosis League, was recently honored by Houston Optimists at a meeting in the Rice Hotel, states the Houston *Press.* She was described as a woman who conceived the idea of saving the community from needless loss of life from tuberculosis and stayed stubbornly with the task. "Her career of unselfish service to all Harris County has been one of the most outstanding service records to be achieved by any woman."

Dr. William M. Freeman has been made chairman of the staff of Madonna Hospital, Denison, and *Dr. S. O. Levin* vice-chairman, reports the Denison *Herald.*

Dr. E. F. Gough, Waxahachie eye, ear, nose, and throat specialist, has closed his offices there to devote his entire time to the Boles Orphan Home, Quinlan, one of the homes of the Church of Christ, the Waxahachie *Enterprise* informs. Dr. Gough has been on the official board of the Home for several years and has donated his part-time services in looking after children in the Home. He now proposes to serve full time without remuneration.

Dr. William G. Carnathan, Henderson, suffered a stroke of paralysis the latter part of December and was reported in serious condition by the Henderson *Times.*

Dr. and Mrs. H. M. Bradford, Greenville, celebrated their golden wedding anniversary Christmas day with a family dinner at the Dallas Athletic Club given by their sons and daughters-in-law, Dr. and Mrs. W. H. Bradford, Dallas, and Mr. and Mrs. H. M. Bradford, Jr., Ennis. Dr. Bradford began practice in Howland, later moving to Greenville, where he is still in active practice.—*Greenville Herald.*

Dr. Robert J. Hanks, Waco, playing football with his two young daughters and other neighborhood children early in January, fell on the lawn and fractured the patella in his right knee, states the Waco *Times-Herald.* He expected to have minor surgery on the knee while in the hospital and to be away from his practice about a month.

Dr. Grady Deaton, who has been health director for the Harris County Health unit for the past year, has resigned to devote his full time to private practice, according to the Houston *Press.*

Dr. and Mrs. Paul Kunstadt, Monahans, entertained in their home in December honoring medical officers and their wives from the Pyote Regional Hospital. Twenty-two guests were present.

Dr. and Mrs. Stanley Whitacre, San Antonio, have contributed their life savings of $40,000 on an annuity basis to Abilene Christian College in Abilene to help alleviate the critical student housing shortage, reports the San Antonio *News.* In return for the gift, the college will pay Dr. and Mrs. Whitacre an annuity based on 6 per cent of the money until the time of their death. The money then becomes an outright gift.

Marriages

Dr. Robert D. Moreton, Temple, married Miss Alma Williamson, Eastland, on September 21, 1945.

Dr. Edward Franklin Wallace and Miss Nancy Ellen Bibb, both of Dallas, were married December 9, 1945. Dr. Wallace, a graduate of the University of Texas School of Medicine, is an intern at St. Paul's Hospital where Mrs. Wallace received nurse's training.

Dr. Cedric Priday, Corpus Christi, married Miss Louise Dorcy, formerly of Corpus Christi and at the time of her marriage on terminal leave as a lieutenant with the Army Nurses Corps, in Dallas on December 11, 1945. The couple will live in Corpus Christi.

Dr. Pauline Merrill, Jacksonville, was married to John F. Dunn, Van, December 29, 1945, at Jacksonville. Dr. Pauline Dunn for the past four and a half years has been house physician at the Nan Travis Hospital at Jacksonville. Mr. John Dunn is a member of the Van High School faculty, having recently been discharged from the Army Air Forces.

Dr. Hazel Montgomery, West, was married to Bynum Helton, also of West, in Temple on November 2, 1945. Dr. Helton will continue her practice in West.

SOCIETY NEWS

Armstrong-Donley-Childress-Collingsworth-Hall Counties Society

December 21, 1945

(Reported by Perry R. Jeter, Secretary)

Tropical Diseases as Observed in the Mediterranean Area—E. K. Jones.

Armstrong - Donley - Childress - Collingsworth - Hall

Counties Medical Society met December 21 at Childress. The above scientific program was carried out after a business session at which the following officers were elected: S. H. Townsend, Childress, president; P. R. Jeter, Childress, secretary; J. H. Jernigan (Childress), E. W. Jones, (Wellington), and J. A. Odom (Memphis), vice-president; E. W. Jones, delegate; P. R. Jeter, alternate; B. L. Jenkins, Clarendon, censor. The Public Relations Committee, composed of J. H. Jernigan, O. R. Goodall (Memphis) and E. W. Jones, was retained.

It was decided to raise the dues to $25 per year.

A letter from R. B. Anderson, chairman of the State Medical Association's Public Relations Committee, pertaining to endorsement of a resolution recommending that the Legislature pass a basic science law, was read. The Society unanimously endorsed the resolution.

Another letter from the State Association pertaining to placement of physicians was also read. The Society took no action as a unit, recommending that the matter be left to each county or community.

Bastrop County Society

January 8, 1946

(Reported by Joe V. Fleming, Secretary)

Bastrop County Medical Society met at noon January 8, in the Chamber of Commerce rooms at Elgin to reorganize. At that time W. E. Wood, Elgin, was elected president; C. M. Hock, Jr., Smithville, vice-president; Joe V. Fleming, Elgin, secretary; J. Gordon Bryson, Bastrop, delegate; Joe V. Fleming, alternate; C. M. Hoch, Sr. (Smithville), W. E. Wood, and J. D. Stephens (Smithville), board of censors; J. Gordon Bryson (chairman), Joe V. Fleming, and J. D. Stephens, legislative committee.

The members were unanimous in agreeing that some form of legislation is sorely needed to control the licensing of practitioners of the healing arts, and that a basic science plan would be the fairest manner of deciding who should be subject to license by the various boards now in effect. They therefore resolved "that legislation should be enacted providing that all who can qualify for a certificate from such a Board of Basic Science Examiners may then appear before professional boards of the types of healing arts of which they wish to practice and secure a license from those boards to practice such arts." The resolution was signed by the president, Dr. Wood, and the secretary, Dr. Fleming, for the Society.

Bell County Society

December 5, 1945

(Reported by O. B. Gober, Secretary)

Ruptured Intervertebral Disk in the Lumbar Region—J. G. Rodarte, Temple.

Bell County Medical Society met December 5 at the Kyle Hotel in Temple, with twenty members and eight guests present.

Application for membership by Robert Nelson Smith, Jr., was approved.

The secretary read a letter from Dr. Holman Taylor stating that the House of Delegates of the State Medical Association at its called session in Waco November 13 had elected Dr. Lee Knight, Temple, to honorary membership in the Association. A letter of appreciation from Dr. Knight was also read.

Prior to the scientific program noted above election of officers for 1946 was held with the following results: A. E. Wiedeman, president; L. D. Stuart, vice-president; O. B. Gober, secretary-treasurer (reelected); L. W. Pollok, (second year), V. M. Longmire (third year), and J. W. Pittman (Belton) (reelected for three years), board of censors; A. C. Scott, delegate (reelected); A. F. Wolf (reelected), L. R. Talley (reelected), and J. W. Pittman (reelected), alternates.

Brazoria County Society

January 10, 1946

(Reported by A. O. McCary, Secretary)

Brazoria County Medical Society met January 10 as guests of Freeport physicians for dinner at the Dow Hotel in Freeport, meeting jointly with the Auxiliary and with dentists of the county.

The following officers for 1946 were elected: William Greenwood, West Columbia, president; Herbert E. Merze, Alvin, vice-president; A. O. McCary, Freeport, secretary-treasurer; S. B. Slaughter, Velasco, delegate; William Ryan, Velasco, alternate; George D. Reeves (Freeport) (chairman), J. G. Hayes (Alvin), and Robert Miller (Velasco), committee on legislation and public relations.

R. B. Anderson, Fort Worth, chairman of the Committee on Public Relations for the State Medical Association, addressed the Society on legislation of interest to the medical profession on both a state and national level.

J. E. Clarke, Houston, Councilor for the Ninth District, also addressed the Society, emphasizing the need for members to become active politically in order that they may render a public service in assuming leadership on legislation pertaining to medicine and the public health, for which service they are particularly qualified.

A round-table discussion of the subject was joined in by a number of members.

Brown-Comanche-Mills-San Saba Counties Society

(Reported by H. B. Allen, Secretary)

Brown-Comanche-Mills-San Saba Counties Medical Society has chosen the following officers for 1946: Homer B. Allen, Brownwood, president; F. W. Farley, San Saba, vice-president; Joseph R. McFarlane, Brownwood, secretary-treasurer; J. M. Campbell, Goldthwaite, delegate; and Ben M. Shelton, Brownwood, alternate.

Caldwell County Society

(Reported by Pruett Watkins, Secretary)

Caldwell County Medical Society has elected the following officers for 1946: O. K. DuBoise, Lockhart, president; Clay Nichols, Jr., Luling, vice-president; W. Pruett Watkins, Luling, secretary-treasurer; A. A. Ross, Sr., Lockhart, delegate; Edgar Smith, Lockhart, and F. C. Luckett, Fentress, alternates; Clay Nichols, Sr., chairman, and F. W. Wilson, committee on legislation and public relations.

Collin County Society

December 11, 1945

Collin County Medical Society met December 11, 1945, at the McKinney City Hospital to elect officers for 1946. The following were chosen: H. F. Wolford, McKinney, president; R. N. Walker, Celina, vice-president; Scott Wysong, Jr., McKinney, secretary-treasurer; O. T. Mitchell (Plano) and W. S. Wysong, Sr. (McKinney), board of censors; C. M. Shumway, McKinney, delegate.

Dinner was served the Society in the dining room of the hospital.

Comal County Society

(Reported by Bertha Frueholz, Secretary)

Comal County Medical Society reports the following officers for 1946: Rennie Wright, president; A. J. Hinman, vice-president; Bertha Frueholz, secretary-treasurer; A. W. C. Bergfeld, delegate; A. J. Hinman and M. C. Hagler, alternates; A. J. Hinman and A. W. C. Bergfeld, committee on legislation and public relations. All the officers are from New Braunfels.

Coryell County Society

(Reported by K. R. Jones, Secretary)

Coryell County Medical Society has elected the following officers for the coming year: M. W. Lowrey, president; K. R. Jones, secretary-treasurer; J. T. Brown, delegate; T. M. Hall, alternate; J. T. Brown, J. H. Hamilton, and K. R. Jones, committee on legislation and public relations. All are from Gatesville.

Dallas County Society

December 13, 1945

Dallas County Medical Society elected the following officers at its meeting December 13 in the auditorium of Southwestern Medical College: Everett C. Fox, president; Andrew B. Small, Jr., vice-president; W. W. Fowler, secretary-treasurer; C. L. Martin, George A. Schenewerk, R. A. Trumbull, and Tate Miller, delegates; David W. Carter, Jr., Homer Donald, Elliott Mendenhall, and M. O. Rouse, alternates; Frank A. Selecman, censor.

Denton County Society

December 7, 1945

Denton County Medical Society met December 7 at the Denton Hospital and Clinic, electing the following officers: William H. Magness, president; Walter Miller, Jr., vice-president; B. J. Short, secretary-treasurer; and Lindley O. Hayes, delegate.

Refreshments were served by M. L. Holland.

DeWitt County Society

(Reported by Corinne Westphal, Secretary)

DeWitt County Medical Society has announced the following new officers: George W. Cross, Yorktown, president; F. A. Prather, Cuero, vice-president; L. B. S. Richter, Yoakum, secretary-treasurer; John Gillett Burns, Cuero, delegate; L. B. S. Richter, alternate; H. H. Brown, Jr. (Yoakum), John Gillett Burns, and Herman C. Eckhardt (Yorktown), committee on legislation and public relations.

Eastland-Callahan Counties Society

(Reported by M. L. Stubblefield, Secretary)

Eastland-Callahan Counties Medical Society has elected the following officers for 1946: A. W. Brazda, Ranger, president; C. L. Jackson, Ranger, vice-president; M. L. Stubblefield, Baird, secretary-treasurer; M. L. Stubblefield, delegate; A. K. Weir, Ranger, alternate; E. L. Graham (Cisco), W. L. Jackson (Ranger), and M. L. Stubblefield, committee on legislation and public relations.

December 11, 1945

Eastland-Callahan Counties Medical Society met in the Connellee Hotel, Ranger, December 11, for supper and a scientific program by A. W. Brazda and C. L. Jackson, both of whom have recently returned from combat duty with the armed services.

Ellis County Society

(Reported by R. M. Tenery, Secretary)

Ellis County Medical Society has elected the following officers for 1946: J. H. Curby, Maypearl, president; James Jeter, Ennis, vice-president; R. M. Tenery, Waxahachie, secretary-treasurer; S. H. Watson, Waxahachie, delegate; E. F. Gough, Waxahachie, alternate; J. E. Jones and M. E. Hastings, both of Waxahachie, committee on legislation and public relations.

Falls County Society

January 14, 1946

(Reported by J. W. Torbett, Sr., Secretary)

Interesting Experiences on Navy Hospital Ship *Solace*—H. O. Smith.

Falls County Medical Society met at the Torbett Clinic, Marlin, the night of January 14. H. O. Smith told of his experiences on a Navy hospital ship, and the membership discussed interesting cases which had come to their attention and current medical literature. M. A. Davison, program chairman, directed the program.

Upon the removal from Marlin of L. C. Carter, who had been elected secretary of the Society, J. W. Torbett, Sr., was named in his place.

Galveston County Society

December 22, 1945

(Reported by Joseph C. Magliolo, Secretary)

Galveston County Medical Society, meeting December 22, elected the following new officers: Francis A. Garbade, Galveston, president; George Beeler, Texas City, vice-president; John McGivney, Galveston, secretary-treasurer; William L. Marr, Galveston, delegate; John J. Delany, Galveston, alternate; Edward Schwab (Galveston), J. C. Magliolo (Dickinson), and Charles Hooks (Galveston), board of censors.

Gonzales County Society

(Reported by C. C. Cogburn, Secretary)

Gonzales County Medical Society has elected officers for 1946 as follows: Walter A. Sievers, Gonzales, president; N. A. Elder, Nixon, vice-president; C. C. Cogburn, Nixon, secretary-treasurer; N. A. Elder, delegate; George Holmes, Gonzales, alternate; C. C. Cogburn and N. A. Elder, committee on legislation and public relations.

Grayson County Society

(Reported by Don W. Freeman, Secretary)

Grayson County Medical Society has elected officers for the coming year as follows: Lois L. Norman, Sherman, president; David K. Jameson, Denison, vice-president; Don W. Freeman, Denison, secretary-treasurer; W. A. Lee, Denison, delegate; W. A. Lee, Arthur Gleckler, G. W. Greer (Whitesboro), and Ross May (Whitewright), committee on legislation and public relations.

Gregg County Society

(Reported by Marjorie Ferrell, Secretary)

Gregg County Medical Society has elected the following officers for 1946: E. O. Watkins, Greggton, president; W. M. Routon, Kilgore, vice-president; Marjorie Ferrell, Longview, secretary-treasurer; J. D. Roberts, Longview, delegate; B. A. Swinney, Longview, alternate; H. A. Ross, Longview, committee on legislation and public relations.

Grimes County Society

(Reported by H. L. Stewart, Secretary)

Grimes County Medical Society has elected officers for the coming year as follows: G. C. Sanders, Richards, president; M. E. Parker, Anderson, vice-president; H. L. Stewart, Navasota, secretary-treasurer; S. D. Coleman, Navasota, delegate; M. E. Parker, E. T. Ketchum (Navasota), G. C. Sanders, and G. C. Harris (Navasota), alternate; S. D. Coleman (Navasota), G. C. Sanders, and M. E. Parker, committee on legislation and public relations.

Guadalupe County Society

(Reported by Ilse Holz Mannheimer, Secretary)

Guadalupe County Medical Society has announced election of the following officers for 1946: Allen Heinen, Seguin, president; N. A. Poth, Seguin, vice-president; Ilse Holz Mannheimer, Seguin, secretary-treasurer; N. A. Poth, delegate; Allen Heinen, alternate; R. L. Knolle (Seguin), Hugh Davis (Seguin), and J. C. B. Douthett (Seguin), committee on legislation and public relations.

Hardin-Tyler Counties Society

(Reported by W. H. Beazley, Secretary)

Hardin-Tyler County Medical Society officers for

1946 are as follows: W. J. Poshataske, Silsbee, president: J. S. Mann, Colmesneil, vice-president; W. H. Beazley, Silsbee, secretary-treasurer; Watt Barclay, Woodville, delegate; J. A. Knight, Beaumont, alternate; W. B. Cline, A. W. Roark (Saratoga), and W. Anderson (Kountze), committee on legislation and public relations.

Harris County Society

December 5, 1945

The Use of Thiouracil in the Treatment of Thyroid Diseases (lantern slides)—C. C. Sturgis, University of Michigan Medical School, Ann Arbor, Mich.

Harris County Medical Society met December 5 in the Medical Arts Building to hear Dr. C. C. Sturgis, of the University of Michigan Medical School, discuss the use of thiouracil in thyroid treatment. Dr. Sturgis, the first speaker brought to the Baylor University College of Medicine under the lectureship established by the College's Alumni Faculty Foundation to honor alumni who lost their lives in World War 2, illustrated with lantern slides his experience in the use of thiouracil. He warned against agranulocytosis as a complication of thiouracil therapy, but said that very likely penicillin would offset that difficulty. While additional study of the drug is necessary, he suggested that its potential value as a therapeutic agent is promising. He also discussed thyroxine, a synthetic thyroid extract, which was first made in 1936 by two Germans.

December 19, 1945

(Reported by H. L. Alexander, Secretary)

Harris County Medical Society on December 19 elected officers for 1946 as follows: Mylie E. Durham, president; J. Wade Harris, vice-president; H. L. Alexander, secretary; J. Reese Blundell, treasurer; John T. Moore, T. R. Hannon, W. E. Ramsay, Hugh C. Welsh, M. B. Stokes, McDonald Orman, and William Snow, delegates; E. R. Seale, Edward T. Smith, C. A. Calhoun, A. T. Talley, Frank Lancaster, J. C. Alexander, and L. L. D. Tuttle, alternates; John M. Trible, chairman, committee on legislation and public relations.

Harrison County Society

November 6, 1945

Harrison County Medical Society at its November meeting unanimously adopted the resolution given below and directed that a copy be sent to each Texas member of Congress representing the Society and to the TEXAS STATE JOURNAL OF MEDICINE:

Whereas, The National Congress has before it the Wagner-Murray-Dingell and the Pepper bills seeking to regiment the medical profession in the care of sickness in general and maternity and childhood cases in particular, and

Whereas, The cost of such care would be two or three times the present rate, and

Whereas, Such regimentation will destroy the initiative and the incentive to excel of the medical profession, and

Whereas, The real motive behind these proposals —socialization—is hid by an humanitarian "smoke screen," and

Whereas, Success in this undertaking will make the attainment of the Totalitarian State easier and of imminent nearness, and

Whereas, Bureaucratic control with its endless paper work and other forms of government "Red Tape" would make medical practice intolerable and little to be desired, and

Whereas, The Public would be very illy served by depriving it of free choice of physicians and by taxing it an amount much above its per capita expenditure for medical services at this time;

Therefore be it resolved, That we, the members of Harrison County Medical Society, do unqualifiedly condemn the so-called Wagner-Murray-Dingell and Pepper bills as subversive of the best interests of the medical profession and the public at large, and do herewith call upon our representatives in the Congress to use all diligence in opposing these bills and relegating them to the limbo of forgotten and justly discarded schemes.

Signed:

F. S. LITTLEJOHN
W. H. BENNETT
ROGERS COCKE
Committee for Harrison County Medical Society.

Hays-Blanco Counties Society

December 20, 1945

(Reported by J. R. de Steiguer, Secretary)

Hays-Blanco County Medical Society has announced officers for the coming year as follows: M. C. Williams, president; R. F. Sowell, vice-president; J. R. de Steiguer, secretary-treasurer; J. M. Van Ness, delegate; L. L. Edwards, (chairman), J. M. Van Ness, and R. F. Sowell, committee on legislation and public relations. All officers are from San Marcos.

The election was held at a banquet meeting in Memorial Hospital, San Marcos, December 20 at which nine members were present.

Henderson County Society

(Reported by Don Price, Secretary)

Henderson County Medical Society has elected the following officers for 1946: R. E. Henderson, Athens, president; A. C. Horton, Brownsboro, vice-president; Don Price, Athens, secretary-treasurer; N. D. Geddie, Athens, delegate; L. L. Cockerell, Athens, alternate; R. H. Hodge (Athens) (chairman), P. T. Kilman (Malakoff), and L. L. Cockerell, committee on legislation and public relations.

Hidalgo-Starr Counties Society

December 13, 1945

Hidalgo-Starr Counties Medical Society met in the dining room of Hotel Edinburg in Edinburg the night of December 13. Seventeen were present.

Officers elected at the meeting included Ralph Hamme, Edinburg, president; Joe May, Edinburg, vice-president; Lloyd M. Southwick, Edinburg, secretary; and C. J. Hamme, Edinburg, censor.

H. E. Whigham, McAllen, reported on the meeting of the House of Delegates of the State Medical Association held in Waco November 13. M. R. Lawler, Mercedes, reported on the meeting of the Southern Medical Association in Cincinnati in November.

Hunt-Rockwall-Rains Counties Society

November 13, 1945

(Reported by Harriet Rogers, Secretary)

Carcinoma of the Larynx—Tom Barr, Dallas.

Hunt-Rockwall-Rains Counties Medical Society met November 13 at Greenville with Joe Becton, president, presiding. Clinical cases were reported by members present. Tom Barr, Dallas, spoke on "Carcinoma of the Larynx."

December 4, 1945

(Reported by Harriet Rogers, Secretary)

Hunt-Rockwall-Rains Counties Medical Society met December 4, at the Washington Hotel, Greenville, with Joe Becton, president, presiding.

Following comments by Harry M. Bradford and Dr. Becton, the Society voted to write its Senators and Representatives to oppose socialized medicine, to ask all local clubs to coöperate in actively opposing it, to publish notices in local papers to inform the public of the dangers involved, and to send

a vote of thanks to the druggists for their support and to the local papers for their courtesy in printing articles on the subject.

Edd Smith, Commerce, was welcomed into the Society by transfer from Fannin County.

The Society elected officers for the coming year as follows: S. D. Whitten, Greenville, president; H. M. Bradford, Greenville, vice-president; Harriet N. Rogers, Commerce, secretary-treasurer; J. W. Ward, Greenville, delegate; W. B. Reeves, Greenville, alternate; and J. C. Cheatham, Wolfe City, censor. President Whitten appointed the following committees: J. W. Ward, Joe Becton (Greenville), and W. P. Phillips (Greenville), legislation and public relations; Ralph Jenks (Greenville), H. E. King (Greenville), B. F. Arnold (Greenville), J. C. Cheatham, and L. T. Waller (Commerce), public health and education.

Following the business meeting, the Medical Society was entertained by the Auxiliary at dinner.

January 8, 1946

(Reported by Harriet Rogers, Secretary)

Spinal Anesthesia—W. P. Phillips, Greenville.
Wounds—L. H. Leberman, Commerce.

Hunt-Rockwall-Rains County Medical Society met January 8 in the courtroom of the Municipal Building, Greenville. W. P. Phillips spoke on spinal anesthesia, and L. H. Leberman spoke on wounds.

Lamar County Society

(Reported by Robert L. Lewis, Jr., Secretary)

Lamar County Medical Society has named officers for 1946 as follows: Marcellus A. Walker, Jr., Paris, president; John A. Stephens, Paris, vice-president; Robert L. Lewis, Jr., Paris, secretary-treasurer; Elbert Goolsby, Paris, delegate; Talma W. Buford, Pattonville, alternate; Robert L. Lewis, Sr. (Paris), Elbert Goolsby, and D. Scott Hammond (Paris), committee on legislation and public relations.

LaSalle-Frio-Dimmit Counties Society

(Reported by John A. Cook, Secretary)

LaSalle-Frio-Dimmit Counties Medical Society has announced the following officers for 1946: Wendell Beall, Pearsall, president; E. M. Howard, Pearsall, vice-president; M. H. Bannister, Pearsall, secretary-treasurer; B. E. Pickett, Sr., Carrizo Springs, delegate; J. E. Beall, Pearsall, alternate.

The president was authorized by the Society to appoint a legislative and public relations committee. Names of the members have not yet been announced.

Lee County Society

(Reported by W. E. York, Secretary)

Lee County Medical Society has announced officers for 1946 as follows: S. W. Mantzel, Giddings, president; W. E. York, Giddings, secretary-treasurer; W. E. York, delegate; S. W. Mantzel, alternate.

Liberty-Chambers Counties Societies

(Reported by E. R. Richter, Secretary)

Liberty-Chambers Counties Medical Society has elected new officers as follows: Frank Guffin, Liberty, president; George H. Fahring, Anahuac, vice-president; E. R. Richter, Dayton, secretary-treasurer; A. R. Shearer, Mont Belvieu, delegate; J. T. Tadlock, Dayton, alternate; J. T. Tadlock and A. R. Shearer, committee on legislation and public relations.

Limestone County Society

(Reported by Marion M. Brown, Secretary)

Limestone County Medical Society has elected the following officers for 1946: R. E. Cromeans, Mexia, president; O. T. Christoffer, Mexia, vice-president; Marion M. Brown, Mexia, secretary-treasurer; Marion M. Brown, delegate; C. P. McKenzie, Mexia, alternate; O. T. Christoffer, C. P. McKenzie, R. E. Cromeans, and Marion M. Brown, committee on legislation and public relations.

Lubbock-Crosby Counties Society

(Reported by Pauline Miller, Secretary)

Lubbock-Crosby Counties Medical Society has elected officers for the coming year as follows: Albert G. Barsh, president; Pauline A. Miller, vice-president; Martin H. Benson, secretary-treasurer; Frank B. Malone, delegate; Otis W. English, alternate; Allen T. Stewart (chairman), Frank B. Malone, and Otis W. English, committee on legislation and public relations. All named are from Lubbock.

McLennan County Society

(Reported by C. F. Miller, Secretary)

McLennan County Medical Society has elected the following new officers: H. T. Aynesworth, president; F. William Hoehn, vice-president; A. O. Manske, secretary-treasurer; H. R. Dudgeon, Sr., delegate; and Boyd Alexander, alternate.

December 20, 1945

McLennan County Medical Society gave a dinner-dance in honor of its sixteen members recently returned from service with the Armed Forces at the Lake Waco Country Club on December 20. About one hundred were present.

Music was played by the Sam Huston College orchestra of Austin. Tables were decorated with poinsettias and evergreens.

Milam County Society

(Reported by T. E. Crump, Secretary)

Milam County Medical Society has elected officers for 1946 as follows: T. L. Denson, Cameron, president; T. S. Barkley, Rockdale, vice-president; T. E. Crump, Cameron, secretary-treasurer; C. G. Swift, Cameron, delegate; Eduard Rischar, Cameron, alternate.

Navarro County Society

December 20, 1945

Navarro County Medical Society held its annual banquet December 20 at the Navarro Hotel in Corsicana. An impromptu and informal program was carried out with Gurley H. Sanders, Kerens, as toastmaster. Thirty-five were present.

Election of officers resulted in the following: Dan B. Hamill, president; W. K. Logsdon, vice-president; and W. R. Sneed, secretary-treasurer.

Nolan-Fisher-Mitchell Counties Society

(Reported by T. J. Barb, Secretary)

Nolan-Fisher-Mitchell Counties Medical Society officers for 1946 are as follows: C. A. Rosebrough, Sweetwater, president; T. J. Barb, Roby, secretary-treasurer; R. O. Peters, Sweetwater, delegate; H. A. Logsdon (Colorado), A. H. Fortner (Sweetwater), and C. U. Callan (Rotan), committee on legislation and public relations.

Orange County Society

December 4, 1945

(Reported by George Y. Swickard, Secretary)

Orange County Medical Society met December 4 in the offices of T. O. Woolley, Orange, to elect officers. E. W. Hawkins was elected president; Dr. Woolley, vice-president; G. Y. Swickard, secretary-treasurer; C. M. Covington, delegate; and Dr. Woolley, alternate.

Red River County Society

(Reported by Charles B. Reed, Clarksville)

Red River County Medical Society has announced the following officers for 1946: Melvin Marx, Jr.,

Clarksville, president; James L. Wright, Clarksville, vice-president; Charles B. Reed, Clarksville, secretary-treasurer; Charles B. Reed, delegate; R. W. Payne, Clarksville, alternate; Nowlin Watson (Clarksville) (chairman), T. R. Butts (Annona), Melvin Marx, Jr., R. W. Payne, Charles B. Reed, and James L. Wright, committee on legislation and public relations.

Tarrant County Society

December 4, 1945

(Reported by X. R. Hyde, Secretary)

Tarrant County Medical Society met December 4 in the Medical Arts Auditorium, Fort Worth, with forty members and four visitors present.

The following officers were elected for the coming year: May Owen, president-elect; W. B. West, vice-president; W. P. Higgins, Jr., secretary-treasurer; C. P. Hawkins, board of censors; T. H. Thomason, board of trustees; C. O. Terrell, and S. J. R. Murchison, delegates (re-elected); and R. G. Baker and Jack Furman, alternates (re-elected). E. L. Howard, president-elect during 1945, will assume the presidency January 1. L. O. Godley will continue as a delegate and R. J. White as an alternate.

Reports of the following officers and committees for 1945 were heard: T. H. Thomason, president; X. R. Hyde, secretary-treasurer; W. G. Phillips, board of trustees; R. H. Gough, legal enforcement; T. C. Terrell, house and building; John J. Andujar, cancer education; Victor E. Bonelli, attendance; Ernest D. Rogers, portrait and memorial; T. J. Cross, bulletin; Judge M. Lyle, medical economics; Young J. Mulkey, procurement and assignment; L. O. Godley, public health advisory; Ross Trigg, industrial relations; Rex Z. Howard, gasoline rationing; J. F. McVeigh, food point advisory; E. E. Anthony, venereal disease; T. J. Cross, medical committee of the Tarrant County War Bond Committee.

A special called meeting to discuss an advertising campaign against the Wagner-Murray-Dingell bills was held following the regular meeting. It was decided to refer the problem to the board of directors.

January 8, 1946

(Reported by W. P. Higgins, Jr., Secretary)

Early Postpartum Ambulation—C. P. Hawkins.
Round-Table Discussion on Early Postoperative Ambulation—Opened by Thomas J. Cross and Nelson L. Dunn.

Tarrant County Medical Society met January 8 in the Medical Arts Auditorium in Fort Worth. The new president, E. L. Howard, expressed his appreciation to the Society for electing him to office.

The scientific program outlined above was carried out. Mal Rumph, John J. Andujar, and Harold J. Shelley also participated in the discussion.

DeWitt Claunch and Blanche O. Terrell were elected to membership on application. W. Burgess Sealy was accepted for membership upon transfer from a Minnesota county society.

Secretary W. P. Higgins, Jr., informed the Society that the manager of the Medical Arts Building wished to utilize part of the space in the Medical Hall for storage rooms. T. B. Bond moved that the matter be referred to the house and building committee. The motion was seconded by Nelson L. Dunn and carried.

R. G. Baker told the Society that certain members had failed to pay one or both of the assessments of the past year and that according to the by-laws these persons were possibly in arrears, and if so their names should be automatically dropped from the rolls. It was moved by C. O. Terrell, seconded by S. J. R. Murchison, that "all members who are liable and have not paid one or both of these assessments be notified by the secretary that they are no longer members of the Tarrant County Medical Society." The motion carried.

Taylor-Jones Counties Society

(Reported by Jack A. Crow, Secretary)

Taylor-Jones Counties Medical Society has elected the following new officers: William T. Sadler, Merkel, president; W. B. Adamson, Abilene, vice-president; Jack A. Crow, Abilene, secretary-treasurer; Wayne V. Ramsey, Abilene, delegate; Frank C. Hodges, Abilene, alternate; William R. Snow, Abilene, and O. W. Little, Abilene, committee on legislation and public relations.

Titus County Medical Society

(Reported by William A. Taylor, Secretary)

Titus County Medical Society has announced officers for 1946 as follows: T. S. Grissom, Mt. Pleasant, president; T. R. Bassett, Mt. Pleasant, vice-president; William A. Taylor, Mt. Pleasant, secretary-treasurer; William A. Taylor, delegate; T. R. Bassett, alternate; William A. Taylor, A. A. Smith (Talco), and J. M. Ellis (Mt. Pleasant), committee on legislation and public relations.

Travis County Society

December 18, 1945

(Reported by Henry L. Hilgartner, Secretary)

Travis County Medical Society met December 18, selecting the following officers for 1946: Charles P. Hardwicke, president; Oliver Suehs, vice-president; Henry L. Hilgartner, secretary; William M. Gambrell, H. A. Scott, and J. C. Thomas, censors; William M. Gambrell (two years) and H. A. Scott (one year), delegates; J. M. Coleman (two years), and M. F. Kreisle (one year), alternates; H. A. Scott, G. F. Thornhill, and J. M. Coleman, committee on legislation and public relations.

Washington County Society

(Reported by O. F. Schoenvogel, Secretary)

Washington County Medical Society has elected new officers as follows: G. A. L. Kusch, Gay Hill, president; H. L. Steinbach, Brenham, vice-president; R. A. Hasskarl, Brenham, secretary-treasurer; G. A. L. Kusch, delegate; R. A. Hasskarl, alternate; Herman Hodde (Brenham), G. A. L. Kusch, R. E. Nicholson (Brenham), committee on legislation and public relations.

Wharton-Jackson-Matagorda-Fort Bend Counties Society

(Reported by J. M. Bauknight, Secretary)

Wharton-Jackson-Matagorda-Fort Bend Counties Medical Society has announced the following officers for 1946: W. S. Thiltgen, El Campo, president; R. G. Johnson, Newgulf, vice-president; J. M. Bauknight, Ganado, secretary-treasurer; R. G. Johnson, delegate; William Blair, Wharton, alternate.

Wichita County Society

(Reported by Robert L. Daily, Secretary)

Wichita County Medical Society has elected 1946 officers as follows: Henry P. Ledford, president; J. B. Nail, vice-president; Robert L. Daily, secretary-treasurer; P. K. Smith, delegate; A. W. Pierce, alternate; O. B. Keil, W. P. Lowry, and L. B. Holland, committee on legislation and public relations. All are of Wichita Falls.

Williamson County Society

December 18, 1945

(Reported by Jay J. Johns, Secretary)

Williamson County Medical Society, meeting in Taylor, December 18, elected new officers as follows: W. C. Wedemeyer, Walburg, president; B. A. Kirkpatrick, Taylor, vice-president; Jay J. Johns, Taylor, secretary-treasurer; M. R. Sharp, Granger,

delegate; Howard Wheeler, Georgetown, alternate; M. R. Sharp, E. Doak (Taylor), and B. A. Kirkpatrick, committee on legislation and public relations.

Wood County Society

(Reported by V. E. Robbins, Secretary)

Wood County Medical Society officers for 1946 have been elected as follows: T. H. Peterson, Mineola, president; F. B. Wheeler, Winnsboro, vice-president; T. B. Reed, Mineola, secretary-treasurer; A. A. McDaniel, Mineola, delegate; W. T. Black, Quitman, alternate; V. E. Robbins (Quitman), T. H. Peterson, and T. B. Reed, committee on legislation and public relations.

Young-Jack-Archer Counties Society

(Reported by E. F. Meredith, Secretary)

Young-Jack-Archer Counties Medical Society has elected the following officers for 1946: D. E. Winstead, Graham, president; B. B. Griffin, Graham, vice-president; E. F. Meredith, Olney, secretary-treasurer; H. E. Griffin, Graham, delegate; W. O. Padgett, Graham, alternate; V. O. Rosser, Jr. (Graham), W. O. Padgett, and H. C. McKinney (Olney), committee on legislation and public relations.

Twelfth District Society

January 8, 1946

Twelfth District Medical Society met at the Shrine Club in Waco on January 8, with sixty-six registered. President Rudolph K. Harlan, president, presided at all meetings.

The following scientific program was carried out:

Treatment of Burns—Tom M. Oliver, Waco.
Discussion—M. W. Sherwood, Temple; H. R. Dudgeon, Sr., Waco; J. L. Burgess, Waco.
Diseases of the Seminal Vesicles (roentgenograms)—Moreton A. Magid, Waco.
Discussion—Lewis W. Pollock, Temple.
Modern Management of Uterine Prolapse—Lewis W. Pollok, Temple.
Medicinal Treatment of Asthma—J. H. Black, Dallas.
Rheumatic Fever—Major Robert W. Kimbro, M. C., A. A. F. Regional and Convalescent Hospital, San Antonio.
Compound Fractures of the Long Bones—Howard Dudgeon, Jr., Waco.

The McLennan County Medical Society was host to members of the District Medical Society and the Women's Auxiliary meeting simultaneously, for luncheon. Elliott H. Mendenhall, Dallas, was the luncheon speaker, using as his subject "You and I As Medical Citizens." H. T. Aynesworth, Waco, newly elected McLennan County Medical Society president, served as toastmaster. He introduced H. F. Connally, Waco, President of the State Medical Association; G. V. Brindley, Temple, Councilor of the Twelfth District; Mrs. M. A. Davison, Marlin, retiring president of the Twelfth District Auxiliary; Mrs. G. V. Brindley, Temple, incoming president of the Auxiliary; Mrs. C. H. Brooks, Waco, District Twelve council woman; Miss Harriet Cunningham, Fort Worth, assistant to the editor, TEXAS STATE JOURNAL OF MEDICINE; J. M. Campbell, Goldthwaite. Approximately one hundred were present for luncheon.

In a business session at which Paul H. Power, Waco, served as secretary, substituting for Robert J. Hanks, Waco, who was ill, Thomas G. Glass, Marlin, was elected president and Frank Connally, Jr., Waco, secretary-treasurer. An invitation from the Navarro County Medical Society to hold the July meeting in Corsicana was accepted.

Dr. Brindley, Councilor, spoke briefly about medical legislation now under consideration by the state and national legislative bodies, and urged all members and societies represented to coöperate with the public relations program being carried on by the State Medical Association.

Arnold O. Manske and Horace H. Trippet, both of Waco, had charge of arrangements for the meeting.

North Texas District Society

December 11, 1945

(Reported by A. L. Ridings, Secretary)

North Texas (Fourteenth) District Medical Society met at the Southwestern Medical College, Dallas, December 11.

The following scientific program was carried out.

Acute Intestinal Obstruction—G. D. Mahon, Dallas.
Discussion—C. D. Bussey, Dallas.
The Rh Factor in the Blood—Joseph M. Hill and Sol Haberman, Dallas.
Surgical Gall Bladder—George Enloe, Fort Worth.
Discussion—V. L. Tuck, Sherman.
Okinawan Medicine—Tate Miller, Dallas.
Discussion—Robert Short, Dallas.
Urinary Infections—Hunners Ulcer—Edward White, Dallas.
Discussion—Howard Shane, Dallas.
The Treatment of Chronic Constructive Pleuritis—Robert Shaw, Dallas.
Discussion—H. F. Carman, Dallas.
Surgical Management of Fractures—T. W. Bywaters, Dallas.
Discussion—J. W. Atchison, Gainesville.
The Diagnosis and Treatment of Genito-Urinary Tuberculosis—John Pace, Dallas.
Discussion—Elliott Mendenhall, Dallas.

The morning scientific session was presided over by R. B. McBride, Dallas, chairman, and Jordon Maddox, Dallas, secretary, of the medical section; the afternoon session by Ira Thomas, Gainesville, chairman, and H. P. Hawk, Gainesville, secretary, of the surgical section.

President W. C. Morrow, Greenville, presided over a business session at which C. B. Thayer, Gainesville, was elected president; H. F. Carman, Dallas, vice-president; and V. L. Tuck, Sherman, secretary-treasurer. Gainesville was selected for the next meeting place, in June. A committee on resolutions consisting of G. E. Brereton, Dallas, and Ira Thomas, Gainesville, was appointed.

AUXILIARY NOTES

Officers of the Woman's Auxiliary to the State Medical Association of Texas: President, Mrs. C. B. Alexander, San Antonio; President-Elect, Mrs. George Turner, El Paso; First Vice-President, Mrs. S. M. Hill, Dallas; Second Vice-President, Mrs. L. W. O. Janssen, Corpus Christi; Third Vice-President, Mrs. Troy A. Shafer, Harlingen; Fourth Vice-President, Mrs. Mark H. Latimer, Houston; Treasurer, Mrs. F. R. Rugeley, Wharton; Recording Secretary, Mrs. Paul H. Power, Waco; Corresponding Secretary, Mrs. Wilbur Robertson, San Antonio; Publicity Secretary, Mrs. E. L. Howard, Fort Worth; Parliamentarian, Mrs. W. R. Klingensmith, Amarillo.

AUXILIARY NEWS

Bexar County Auxiliary had a coffee December 14 in the Bexar County Medical Library, San Antonio, honoring Mrs. C. B. Alexander, San Antonio, president of the State Auxiliary.

The social committee, composed of Mrs. Charles L. McGehee, chairman; Mesdames Lloyd Ross, Royal M. Calder, C. H. Dittman, H. A. French, W. W. Maxwell, L. P. Mays, J. A. McIntosh, J. B. Miller, Jr., and I. C. Skinner, had charge of arrangements. Mesdames Scott Applewhite, Frank Haggard, and E. V. Depew, past presidents of the State Auxiliary, served.

Dallas County Auxiliary met December 5 with the war activities committee as hostesses. Mrs. John M. Pace, program chairman, presented Mrs. Hubert Foster in a program of piano music. Mrs. Joseph H. McCracken, Jr., president, presided over the business session. A silver shower was contributed to the Red Cross and the Hospital Committee.—Mrs. J. R. Maxfield, Jr., Publicity.

El Paso County Auxiliary held a luncheon meeting November 12 at an El Paso hotel. Mrs. J. J. Gorman gave a book review for sixty-three members and

fourteen wives of Army medical officers, who were guests.

In addition to the regular November meeting, a cocktail party and dinner was held November 16 in the International Museum honoring returned medical officers and their wives. Garlands of red berries decorated the tables and bouquets of red berries were used throughout the room.

El Paso County Auxiliary had a mother and daughter tea in the home of Mrs. E. G. Causey on December 10. Red candles and spruce were used as a centerpiece on the table covered with a cut work cloth. Poinsettias and white chrysanthemums decorated the living room. Members of the house party were Mesdames John A. Hardy, C. M. Hendricks, Russell Holt, R. B. Homan, Sr., Ralph Homan, D. H. Huffaker, R. P. Hughes, E. H. Irwin, W. R. Jamieson, Gerald H. Jordan, C. E. Jumper, N. H. Keller, Harvey Kinard, Sam King, J. W. Laws, Harry Leigh, A. D. Long, K. D. Lynch, David Cameron, L. O. Dutton and J. R. Fuchlow. A silver offering was taken to help buy Christmas gifts for patients in William Beaumont General Hospital.

Mrs. A. J. Eck and Mrs. S. J. Gaddy were delegated to buy presents for tuberculosis patients at the El Paso County Hospital. This project is carried out annually by the Auxiliary.—Mrs. H. Earl Rogers, Publicity Chairman.

Galveston County Auxiliary honored members of the Galveston County Medical Society who have returned from active service in the Armed Forces and their wives with a Christmas reception at the home of Dr. and Mrs. R. E. Cone in Galveston, the evening of December 16. Approximately 140 were in attendance.

Honor guests were Dr. and Mrs. W. F. Spiller, Dr. and Mrs. Hugh Gilliam, Dr. and Mrs. Weldon Stephens, Dr. and Mrs. Herman Weinert, Dr. and Mrs. Robert Moore, Dr. and Mrs. George Beeler, Dr. and Mrs. G. Mason Kahn, Dr. and Mrs. G. R. Manske, Dr. and Mrs. B. R. Parrish, Dr. and Mrs. Clarence Quinn, Dr. and Mrs. Hamilton Ford, Dr. Virginia Blocker, and Dr. and Mrs. A. J. Jinkins.

Mrs. John McGivney, Mrs. Clarence Sykes, and Mrs. D. Bailey Calvin planned the reception. Hosts and hostesses assisting Dr. and Mrs. Cone were Dr. and Mrs. Francis A. Garbade, Dr. and Mrs. William Marr, Dr. and Mrs. John Otto, Dr. and Mrs. E. R. Thompson, Mrs. L. E. Chapman, and Dr. and Mrs. W. J. Jinkins.

The refreshment table was centered by red chrysanthemums and silver eucalyptus leaves flanked by silver candelabra holding white tapers. Large bowls of chrysanthemums and greenery decorated the house.

Hidalgo-Starr Counties Auxiliary met December 13 in the Hotel Edinburg in Edinburg, with nine present. Mr. T. W. Glass, Weslaco, read Why the Chimes Rang, by Raymond Allen.

Hunt-Rockwall-Rains Counties Auxiliary gave its annual Christmas banquet honoring members of the Medical Society in the All-American Room of the Washington Hotel, Greenville, on December 4. More than a hundred were present.

The Rev. James L. Sandlin, pastor of the Central Christian Church and a former chaplain, spoke of his experiences with the Army Medical Corps in the South Pacific. He declared that the medical profession had done the most outstanding service in the entire Army, and that one of the blessings from the war was the advancement of medical science.

W. C. Morrow, president of the North Texas Medical Society, talking on "What It Means to Be a Doctor," gave the early history of medicine and treatments and paid tribute to the family physician and the country doctor.

Wendell Pool, recently returned from four years in the Army, brought greetings from the dentists and urged closer coöperation between physicians and dentists.

A fine arts program was introduced by Mrs. H. W. Maier, program chairman, who presented Mrs. J. E. Chastain and Mrs. Leah Parker-Beall in solos accompanied by Mrs. E. R. Hays. Members of Mrs. Mair's committee were Mesdames W. L. Yarbrough, S. D. Whitten, Bailey Birdsong, and J. M. Hanchey.

Mrs. B. F. Arnold, president of the Auxiliary, presided and extended greetings. Joe Becton, president of the Medical Society responded. The Rev. J. E. Chastain delivered the invocation.

The speakers' table was centered with a red crystal bowl filled with red carnations and snapdragons, and garlands of nandina berries and ivy extended the length of the table and encircled triple crystal candelabra holding red lighted tapers. The other tables carried out the same motif.

Taylor-Jones Counties Auxiliary entertained the Medical Society with supper December 11 at the Abilene Club. Mrs. L. J. Pickard, Mrs. J. B. Bridges, and Mrs. J. M. Daly were hostesses. About fifty were present.

Dr. L. J. Pickard, president of the Medical Society, gave a welcome. Mrs. L. W. Hollis, president of the Auxiliary, welcomed the physicians who had returned from military service. W. T. Sadler, of Merkel, president-elect of the Medical Society, was introduced.

A contribution of $30.25 was made by the Auxiliary to the Goodfellow fund.

Games were played following supper.

A red and white color scheme was used in decorations, with red and white candles centering the dining tables.

Travis County Auxiliary held its annual philanthropic meeting December 11 at the home of Mrs. R. V. Murray, Austin. Other hostesses were Mesdames C. M. Darnell, chairman, T. N. Watt, Harry T. Davidson, William M. Gambrell, J. W. Gibson, Will Watt, Banner Gregg, Henry C. Paine, Clay Perkins, and G. W. Post.

Mrs. Joe Eckhardt led the singing of Christmas carols and Mrs. Robert A. Stalker gave a Christmas reading. Members brought contributions for the child and family service to be distributed where needed.

Mrs. John A. Crockett, president, and Mrs. T. J. McElhenney, Seventh District council woman, served at the tea table, which was centered with a lighted Christmas tree.

Fourteenth District (North Texas) Auxiliary met in Dallas December 11 at the home of Mrs. S. M. Hill, first vice-president of the State Auxiliary.

In a business meeting conducted by Mrs. O. W. Robinson, Paris, District president, who was introduced by Mrs. Joseph McCracken, Jr., president of Dallas County Auxiliary, the following officers were elected by acclamation: Mrs. Robinson, re-elected president; Mrs. Earl Stirling, Sulphur Springs, vice president; and Mrs. Leslie Moore, Dallas, secretary-treasurer. Mrs. Cecil O. Patterson conducted the election following nomination by a committee composed of Mrs. S. H. Watson, Waxahachie, chairman; Mrs. R. S. Usry, Dallas, and Mrs. S. Byrd Longino, Sulphur Springs.

It was decided to hold the June meeting in Gainesville.

A comprehensive discussion of the Wagner-Murray-Dingell bills was given by Mrs. O. M. Marchman, Dallas, who urged members to acquaint themselves with the bills. She stated that the physicians were requesting the Auxiliary to help fight the bills

by getting voters interested and by writing their congressmen letters opposing the bills.

Mrs. Moore, acting for Mrs. Usry, read the minutes of the preceding meeting and also gave the treasurer's report.

Preceding the business meeting, Mrs. Hill entertained with a no host luncheon. Guests were furnished transportation from the Baker Hotel to the Hill residence by members of the Dallas County Auxiliary.—Mrs. O. W. Robinson, President.

BOOK NOTES

[1]**Transactions of the American Proctologic Society, Forty-fourth Annual Session, June 12 and 13, 1944.**

As would be expected, the transactions followed the same general outline as that of previous meetings, that is, the business meeting, president's address, and then the scientific program. The volume is well organized and, as usual, begins with a review of proctologic literature for 1942-1943. The first review is devoted to malignant diseases and the second one to nonmalignant conditions. Neither review makes an attempt, and this is so stated, to cover all the articles appearing in the literature for the period mentioned. In a measure, however, they cover the general field, but many excellent articles are omitted.

It is difficult to group the material, but an attempt is made to cover the literature on malignant diseases as follows: (1) research, (2) diagnosis and treatment, which includes preoperative and postoperative care, (3) operative technic, (4) complications, (5) statistics, (6) x-rays and radium, and (7) unusual cases. This covers 46 pages and 141 articles, the comments ranging from seven or eight lines to one-half page.

The review of nonmalignant diseases covers the entire field, and, due to the wide diversity of subjects covered, no attempt is made to group them. The comments and synopses on articles mentioned show very careful and intelligent reading. This review covers 24 pages and 52 articles. To any one especially interested, these reviews are very valuable; the comments are worth while, and essentially all the articles are from American literature which is available in our own Texas State Medical Association Library.

Next in the program of transactions is a symposium on cancer of the colon and rectum, as follows: (1) "Surgical Treatment of Cancer of the Rectum and Pelvic Colon," Harry E. Bacon, Orville C. Gass, and William D. Todhunter; (2) "Diseases of the Colon," Frank H. Lahey; and (3) "The Lynch Operation for Cancer of the Rectum," Claude G. Tucker. These three papers, together with carefully prepared discussions, bring the subject to date. Various technics are mentioned and discussed, but to quote T. E. Jones, of Cleveland, who is one of the masters of intestinal surgery, "Less depends on the method used than upon the execution." For best results, highly trained team work is necessary. From various reports from the larger clinics during the past five years, the operability of cancer of the rectum and colon has gone up 80 per cent, and the mortality rate down 5 to 12 per cent. The assigned reasons have to do with preoperative care, highly trained groups or teams, anesthesia, and postoperative care. This symposium is both stimulating and encouraging.

Next follow five well prepared papers on prominent subjects, and then case reports. There are ten of these reports, all written by men of wide experience. The carefully prepared discussions comprise a valuable contribution.

The program in general has little to do with the most frequently found anorectal diseases, namely, hemorrhoids and fistula-in-ano, but is largely devoted to malignant and pre-malignant conditions. This volume contains much of interest and value, not only to proctologists, but to all active physicians, especially to those in general medicine and surgery.

[2]**The Treatment of Peritonitis and its Aftermath.** By Thomas B. Noble, Jr., M. D., F. I. C. S. Visiting Surgeon, Methodist Hospital, St. Vincent Hospital, Hamilton County Hospital; Consulting Staff, Indianapolis City Hospital. Cloth, 235 pages. Price, $5.00. Indianapolis, Indiana, A. Vernon Grindle, Publisher, 1945.

The author of this book has made a definite contribution in a field that heretofore has seen too often only failure or at best unsatisfactory results.

In the years ahead if the knowledge contained in this book is utilized, the surgeon, internist, gastroenterologist, gynecologist, and above all the general practitioner will be in a better position to save another life or at least improve the health of patients with whom they will come in contact.

Not long ago Dr. Arthur E. Hertzler said, "There is so much of assumption and bad logic in the writings on the peritoneum that to select the useful is no simple task." It is for this reason and because Dr. Noble has written something useful that the reviewer recommends the reading of this book to the profession.

The author states that appendicitis is today the most frequent and serious abdominal pathologic-lesion and it is my personal opinion that the proper handling of appendicitis requires more surgical judgment than any other condition within the abdomen. I am in complete agreement with the author in his criticism of the profession generally in their attitude towards appendicitis and their condoning of any old "cutter" taking out an appendix now and then while feeling that other abdominal surgery is beyond his capability.

I do not agree with the author in his use of and opinion of sulfathiazole, and local application can be augmented by intravenous or subcutaneous administration. One can easily get into a serious argument however, on the relative merit of the various sulfa preparations, each practitioner having his own reason for using a particular sulfa drug; but this reason should always be that, in his opinion, it is best for the patient.

The author condemns the use of any misleading terms so common today when referring to a patient with peritonitis, and for this reason should be roundly applauded. Also his remarks about an attentive, active nurse administering to the needs of the patient rather than covering up these needs by morphine are very much in order. He notes too, that it takes at least one month for fascia to unite firmly. This fact is often overlooked.

His statement that his method of handling late cases of peritonitis has reversed the mortality rate from 90 per cent to 10 per cent and having the statistics to back it up with certainty merits our attention, as nothing in the past has even approached these figures. Likewise, his statement that 95 per cent of patients with late perforating wounds have recovered and show no disability or invalidism from adhesions should be especially interesting, particularly to those who have recently cared for such cases in the Armed Forces. The author states that none of his patients has hade to be reoperated on for

[1]Reviewed by Frank G. Sanders, M. D., Fort Worth, Texas.

[2]Reviewed by George A. Schenewerk, M. D., Dallas, Texas.

obstruction or adhesions. This fact certainly gives weight to his method.

His remarks concerning self-retaining retractors and gauze packs as a cause of postoperative adhesions should make surgeons realize the importance of using them properly and when necessary, rather than discontinuing their use altogether. Practically every physician at one or more times has seen some "operator" pushing and shoving a pack in the abdomen and has wondered why he did not go ahead and use his foot also. Use of a self-retaining retractor means that no one is available to hold retractors. In this case self-retaining retractors should be loosened at least every fifteen minutes. I, myself, do not believe that moist gauze used properly is much of a factor in permanent postoperative adhesions.

It seems to me that his use of drains is not in date with his new methods. Nowadays it is rare that I find it necessary to use any kind of drain at all. Usually after removal of, or attention to, the offending agent and proper application of sufanilamide, the incision is closed without drains of any kind being placed into the peritoneal cavity. The results are much better than when a foreign body such as a hard rubber tube is left in, which in itself is one of the main causes of postoperative adhesions. Peritonitis usually subsides rapidly when the source of continuing contamination is removed. This is particularly true in the acute, rapidly spreading type.

In conclusion: many adhesions are only temporary and will disappear with subsidence of the infection, whereas others will be permanent. The question still remains, "Is this adhesion causing any degree of obstruction or impairment in bowel function?" Dr. Noble's work has presented the most satisfactory answer to this last question up to the present time and is a definite contribution to a most difficult problem.

VENEREAL DISEASE ABSTRACTS*

Syphillis Among Civilians During World War II, January 1, 1942, Through June 30, 1943. Lida J. Usilton, Journal of Veneral Disease Information, Washintgon, 26:263-266 (Dec.) 1945.

A possible slight downward trend in civilian rates for syphilis during the war period was detected in a statistical analysis of blood serologic tests performed on 266,640 Selective Service registrants, comprising a random 20 per cent sample of those examined in twenty-seven States between January 1, 1942, and June 30, 1943.

The analysis showed that insofar as the incidence of syphilis is reflected in the occurrence of positive serologic tests of the blood, no rise in syphilis rates took place in the civilian population during an eighteen-month period when the war effort was expanding very rapidly. Tabulations were made for each six three-month time periods by state, age, race, and results of tests.

Among individual states within each of four large geographic areas, rates were so similar and numbers tested so small that no significant difference could be demonstrated. Differences among total rates for each of the four areas were too great to warrant combining these for a total trend line for the entire country.

Time trend lines were constructed for each age from 20 through 25, where the slope was significantly different from zero. Trend lines were constructed for both whites and nonwhites in the Southern and Midwestern areas, but not for the Northwestern and Western areas where the number of nonwhites tested was small.

In the southern States the average trend in rates was clearly downward for both whites and nonwhites of all ages.

In the Midwestern States the only significant changes were a rise in positivity rates for 25-year-old white men, and a decrease for 21-year-old nonwhites.

In the Northeastern States there was a significant but slight average rise for all ages combined.

There was no significant average trend in the Western States, in spite of the significant rise among the 22-year-old group.

The absence of any great rise in the incidence of syphilis in any section of the country, and the possible slight decrease for the country as a whole, may be due largely to effective and intensive cooperative joint efforts of civilian and military authority to control the venereal diseases.

*Abstracts of articles appearing in *The Journal of Venereal Disease Information* (formerly *Venereal Disease Information*), prepared by the Venereal Disease Division, U. S. Public Health Service.

NEW PEDIATRICS PUBLICATION

The *Quarterly Review of Pediatrics* will make its first appearance with the February issue. This new journal, according to the Foreword, is designed to help the busy physician keep abreast of the most recent progress in all branches of pediatrics with a minimum of time and effort and also to serve as an authoritative guide to original sources when more detailed information is desired.

The journal will contain abstracts of articles of significance which deal with disease conditions, health, growth, and mental welfare from infancy through adolescence. These abstracts will be prepared by trained bibliographers, mostly physicians, and the editors will add interpretive or critical comments whenever necessary. Review articles with self-explanatory titles, and others for which only a brief note is needed will be listed following the abstracts in each of twenty-eight subject groupings. In addition new books about which the pediatrician should know will be reported.

Issues of the *Quarterly Review of Pediatrics* will appear in February, May, August, and November, with Dr. Irving J. Wolman, Children's Hospital, 1740 Bainbridge St., Philadelphia, Pa., as editor-in-chief and an editorial board composed of sixteen outstanding pediatricians. The *Review* is another venture of the Washington Institute of Medicine, which already publishes a number of journals in other specialties.

DEATHS*

Dr. George W. Allen, Jr., San Antonio, Texas, died after a short illness at his home December 23, 1945.

Dr. Allen, son of Dr. George W. and Amanda (Evans) Allen, was born in Flatonia July 25, 1876. He attended Southwestern University in Georgetown and was graduated from the University of Texas Medical Department, Galveston, in 1900. Following his graduation Dr. Allen returned to Flatonia and became associated with his father and another physician in operation of their hospital. In 1905 Dr. Allen moved to Yorktown, in 1917 opening the Allen Hospital, which he operated until 1942. In that year he moved to Victoria for about three years, then going to San Antonio. He had maintained a home in Yorktown, however, and business connected with the discovery of oil on his land brought him there frequently. During his career Dr. Allen had attended clinics in New York City, Canada, Germany, Vienna, and Scotland.

Dr. Allen was a member from 1908 until his death of the State Medical Association and American Medical Association, first through the DeWitt County Medical Society and then through the Victoria-

*An obituary ordinarily will not be published more than four months after date of death. Cooperation in reporting deaths of physicians and in furnishing appropriate biographical material promptly is solicited.

Calhoun-Goliad Counties Medical Society. He was a Mason, and a member of Knights of Pythias, and the Chamber Commerce. He actively supported church and school projects. He was a lover of sports and for many years had maintained a lodge on the coast for deep sea fishing.

DR. GEORGE W. ALLEN, JR.

Dr. Allen was married at Flatonia to Miss Katie Burns. He is survived by his wife; a daughter, Mrs. Hampus Roos, Victoria; a son, Garland Allen, Yorktown; two sisters, Mrs. G. W. Cross, Yorktown, and Mrs. Emma Bailey, Midland; and two brothers, Will Allen, Luling, and T. L. Allen, California.

Dr. Holcombe McRae Austin, Laredo, Texas, died November 18, 1945, at his home.

Dr. Austin, son of Dr. William M. and Mrs. Mary (Holcombe) Austin, was born April 29, 1878, in Jackson, La. He received his academic education at Centenary College (now located at Shreveport, La.) in Jackson. He was graduated from the University of Texas Medical Department in Galveston in 1902 and later did postgraduate work at Tulane and Johns Hopkins Universities. After serving an internship at John Sealy Hospital, Galveston, Dr. Austin went to San Luis Potosi, Mexico, as surgeon of the Mexican National Lines. In 1914 he moved to Laredo, where he remained until his death. In addition to carrying on private practice he became surgeon for the Mexican National Lines there and also served as surgeon for the Texas-Mexican Railway. He had been city physician for a number of years and had rendered service in connection with the Selective Service system for the past three years.

DR. HOLCOMBE M. AUSTIN

Dr. Austin had been a member since 1915 of the State Medical Association and American Medical Association through the Webb and, after its organization, of the Webb-Zapata-Jim Hogg Counties Medical Societies. He had served the county organization in various capacities, being president several times and at the time of his death. He was a member of the Southern Medical Association and a fellow of the American College of Surgeons. He was an elder in the Presbyterian Church, a member and former president of Rotary, a member of the Chamber of Commerce, a member of the Louisiana Society of the Sons of the American Revolution, and a member of Kappa Alpha fraternity.

Dr. Austin on November 9, 1904, in Laredo was married to Miss Susan McCulloch, who survives. He is also survived by a son, Dr. Holcombe McCulloch Austin, of Norton, Mass., and one sister, Mrs. N. E. Joyner, of Minden, La.

Dr. Thomas Bridgers Bass, Abilene, Texas, died at his home December 22, 1945, of chronic myocarditis.

Dr. Bass, son of Sidney and Laura (Bridgers) Bass, was born June 25, 1865, in Homer, La. He moved with his parents to Texas and attended the schools in Sulphur Springs and Terrell. His academic education was obtained at Virginia Military Institute, and his medical education at Tulane University, from which he was graduated in 1885. He first opened private practice at Terrell, Texas, becoming second and then first physician at the North Texas Hospital for the Insane, Terrell, between 1892 and 1897. He again was in private practice in Terrell from 1897 until 1903. At that time he was called to the Abilene State Hospital as first assistant physician, becoming superintendent in 1909. He served in that capacity until 1943, when he retired to practice privately in Abilene until his death. After retiring from the hospital superintendency Dr. Bass was appointed physician for McMurry College in Abilene.

DR. THOMAS BRIDGERS BASS

Dr. Bass was a charter member of the State Medical Association, through Taylor-Jones Counties Medical Society. He had served the Taylor-Jones Society as president and the State Medical Association as vice-president. He was also a member of the American Medical Association, a past president of the Big Spring-El Paso District Medical Society, a past vice-president of the American Psychiatric Association, a past president of the Texas Psychiatric Association, and a member of the Southern Medical Association. He was a leader in founding St. Paul's Methodist Church, Abilene, and had served that organization in various capacities, several times as chairman of the board of stewards. He was a charter member of the

Abilene Lions Club, a Mason, and a member of Odd Fellows, Knights of Pythias, and Woodmen of the World. He had served as a director of the Abilene Chamber of Commerce and for many years as chairman of its agriculture committee.

Dr. Bass in 1893 in Batesville, Ark., married Miss Seddie Joblin, who survives. Also surviving are three daughters, Mrs. Mack Pegues, Fort Worth; Mrs. Andrew Urban, Jr., Abilene; and Mrs. M. L. King, Ranger; one son, Tom J. Bass, Olney; and four sisters, Mrs. Harry Galbraith and Mrs. J. P. Elliott, both of Terrell; Mrs. Wylie Smith, Houston; and Mrs. John Peyton, Shreveport, La.

Dr. John Dee Jackson, Kerrville, Texas, died at his home of coronary occlusion December 31, 1945.

Dr. Jackson was born February 7, 1890, in Moulton, Iowa, the son of Mr. and Mrs. Thomas Jackson. He attended the public schools of Carthage, Ill.; John B. Stetson University in De Land, Fla.; and the University of Chattanooga in Chattanooga Tenn. His medical education was obtained at Washington University School of Medicine, St. Louis, where he received his degree in 1915. Dr. Jackson served an internship at Mulanphy Hospital in St. Louis for one year before opening practice in Kansas City. Three years later he moved to Kerrville, Texas, where he was in active practice until his death. During the first World War Dr. Jackson was a first lieutenant in the Army, assigned to research work at Yale University.

DR. JOHN D. JACKSON

Dr. Jackson had been a member since 1920 of the State Medical Association and American Medical Association, through the Kerr-Kendall-Gillespie-Bandera Counties Medical Society. He served the county society as secretary from 1920 until his death. He was also a member of the American Trudeau Society and American College of Chest Physicians. He had been physician for Schreiner Institute, Kerrville, since 1923, and was chairman of the Procurement and Assignment Advisory Committee for Physicians for Kerr, Kendall, Gillespie, and Bandera Counties. He had been Kerr County Health Officer since 1937. He was a member of the Presbyterian Church, Masonic order, Scottish Rite, Shrine, Rotary Club, and Chamber of Commerce.

Dr. Jackson is survived by his wife, the former Miss Irene Barnes, whom he married in Chattanooga, Tenn., December 20, 1916; two daughters, Mrs. Park L. Meyers, Kerrville, and Mrs. William F. Thompson, Austin; and two sisters, Mrs. Wilbur Gibson, Hamilton, Ill., and Mrs. Perry Barbe, Ithaca, N. Y.

Dr. Zack Cleveland Fuquay, Mt. Vernon, Texas, died suddenly of heart disease at his home December 16, 1945.

Dr. Fuquay, son of C. S. and Georgia (Bryant) Fuquay, was born in the Hopewell community Franklin County, Texas, on September 12, 1887. His medical education was secured at Baylor University College of Medicine, Dallas, from which he was graduated in 1910. He later did postgraduate work at Tulane University. After his graduation, Dr. Fuquay located in Mt. Vernon and practiced there until his death.

Dr. Fuquay had been for many years a member of the State Medical Association and American Medical Association, first through the Franklin County Medical Society and, after its organization, the Hopkins-Franklin Counties Medical Society. He served the county society as secretary from 1933 to 1936. He was county health officer, local surgeon for the Cotton Belt Railway, a Mason, a member of the local school board, and for thirty-five years a steward in the Methodist Church.

Dr. Fuquay July 10, 1910, married Miss Myrtle Kidwell, who survives. He is also survived by one daughter, Mrs. J. T. Blailock, Fort Worth; three sisters, Mrs. John Hague and Mrs. Lee Rutland, both of Mt. Vernon, and Mrs. F. O. Taylor, Winfield; one brother, Archie Fuquay, Mt. Vernon; and one grandson, Zack Blailock, Fort Worth.

Dr. Marcus Aurelius Weems, East Columbia, Texas, died of carcinoma of the prostate January 3, 1946, at his home in the same bed and the same room in which he had been born November 19, 1867.

Dr. Weems was the third son of seven children born to Dr. Mason Locke and Mrs. Anna Eliza (Smith) Weems. He attended grammar school in his birth place, East Columbia, and then went to high school in Houston. He obtained his medical education at the University of Pennsylvania, Philadelphia, being graduated in 1890. He returned to Texas and at the time of his death had served the community near East and West Columbia in Brazoria County for more than fifty years. His physician father had come to the locality in 1831, and the son followed in the father's pioneering footsteps, not only in the practice of medicine but in contributing his time and energy to the growth and betterment of the community. He was fond of literature and had built up an excellent personal library devoted to a variety of interests.

DR. MARCUS A. WEEMS

Dr. Weems came from a family of physicians, one brother, the late Dr. Mason Locke Weems, IV, his father, and his grandfather all having been practitioners and all traditionally graduates of the University of Pennsylvania. His great grandfather, the first Mason Locke Weems, was a clergyman and

an intimate friend of George Washington. It was this Weems who wrote the life of Washington in which for the first time the famous cherry tree incident was told.

Dr. Weems was a charter member of the State Medical Association and was also a member of the American Medical Association through the Brazoria County Medical Society. He was a thirty-second degree Mason and a member of the Rotary Club.

Dr. Weems is survived by one sister, Mrs. Anna Laura Craig, and one brother, Sands Smith Weems, both of East Columbia.

Dr. Dexter H. Hardin, Dallas, Texas, died November 17, 1945, at a Dallas hospital of a brain tumor.

Dr. Hardin, son of the Rev. Dexter Columbus and Mrs. Emma E. (Duncan) Hardin, was born November 15, 1894, at Ozark, Ark. He came to Texas as a boy, however, and received his academic education in the Dallas public schools and at Southern Methodist University. He was graduated in medicine from Baylor University Medical College, then in Dallas, in 1920, and served an internship at Baylor Hospital in Dallas. He began private practice in Dallas in 1921 and had remained there until his death, also serving on the faculties of Baylor University Medical College and Southwestern Medical College. During the first World War Dr. Hardin served in the Medical Corps.

Dr. Hardin had been since 1921 a member of the State Medical Association and American Medical Association through the Dallas County Medical Society. He was also a member of the Dallas Southern Clinical Society and a fellow of the American College of Physicians. He belonged to the Phi Chi medical fraternity, Presbyterian Church, Kiwanis Club, Masonic order, and Dallas Country Club.

Dr. Hardin was married in 1921 in Dallas to Miss Lou Reed, who preceded him in death October 3, 1941. He is survived by four sisters, Misses Idessa and Hallie Hardin and Mrs. R. G. Taylor, all of Dallas, and Mrs. R. C. Fullbright, of Houston.

Dr. Cecil Block died at his home in Dallas, Texas, of coronary disease on December 7, 1945.

Dr. Block was born in Dallas, March 28, 1888, the son of Dave and Jeanette (Kahn) Block. He attended public schools in Dallas and received his medical degree from Baylor University College of Medicine there in 1909. He later took postgraduate work at Johns Hopkins University, Baltimore, Md. Dr. Block served an internship at St. Paul's Hospital, Dallas, and then began the practice of medicine which he had carried on there until the time of his death. He was a member of St. Paul's Hospital staff.

DR. CECIL BLOCK

Dr. Block had been for a number of years a member of the State Medical Association, and the American Medical Association, through the Dallas County Medical Society. He served four years as a medical examiner for Selective Service, was a member of Temple Emanu-El, was director of the Salesmanship Club, a past president of the Fellowship Club, and a member of the Columbian Club.

Dr. Block was married February 17, 1914, in Dallas to Miss Eula Carpenter, who survives. He is also survived by two daughters, Mrs. Fred L. Hirsch, Dallas, and Mrs. Joe L. Weil, Jr., Corpus Christi; and four sisters, Mrs. J. H. Morris and Miss Henrietta Block, both of Dallas; Mrs. Will Montag, Atlanta, Ga.; and Mrs. Bernard Lehman, Dayton, Ohio.

Dr. Jefferson Davis Lovelace, Waco, Texas, died there September 20, 1945.

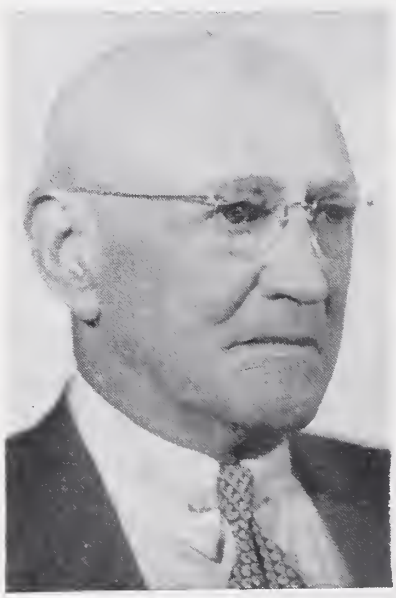
Dr. Lovelace, son of Charles Richard and Katherine Lovelace, was born October 24, 1861 at Oxford, Miss. He attended schools there and then took his medical degree at Missouri Medical College, St. Louis, in 1888. He began practice at Lanham, Texas, moving from there to South Bosque in 1897, and to Speegleville in 1919. Almost his entire professional career was spent in McLennan County.

Dr. Lovelace was for several years a member of the State Medical Association and American Medical Association through the McLennan County Medical Society, which he served as treasurer. Dr. Lovelace enjoyed reading and read extensively.

Dr. Lovelace was preceded in death February 14, 1932, by his wife, the former Miss Mary Rebecca McLennan, whom he married in March, 1896, at McGregor. He is survived by one daughter, Mrs. Mary Josephine Roberts, and one son, Darwin Lovelace, both of Waco; a sister, Mrs. Mattie Jones, Fluvanna; and a brother, Charles Nathaniel Lovelace, Houston.

Dr. Charles Howard Bellamy, Dallas, Texas, died of coronary occlusion January 9, 1946.

Dr. Bellamy, son of A. and Mary Bellamy, was born August 17, 1874, in Toledo, Ohio. He attended the public schools of Toledo and received his medical education at the Physio-Medical College of Indiana, being graduated in 1897. He began practice in Toledo, where he remained until 1907, when he moved to Dallas, practicing there until his death. He was on the staffs of Baylor Hospital and St. Paul's Hospital.



DR. CHARLES HOWARD BELLAMY

Dr. Bellamy since 1922 had been a member of the State Medical Association and American Medical Association through Dallas County Medical Society.

Dr. Bellamy was married September 23, 1899, in Toledo to Miss Elizabeth M. Morisse, who survives. He is also survived by two sons, Dr. R. M. Bellamy, Pampa, and Dr. Lloyd C. Bellamy, D. D. S., Dallas.

Texas State Journal of Medicine

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

The American Medical Association Constructive Medical Care Program.—There is published elsewhere in this number of the JOURNAL (p. 603), a press and radio release issued by the Board of Trustees of the A. M. A., February 16 and 17, giving in detail the constructive program for medical care of the people of the United States formulated by the Board of Trustees and the Council on Medical Service and Public Relations of the American Medical Association in response to the specific direction of the A. M. A. House of Delegates, which met in Chicago December 3, 4, and 5, 1945. Each member of the Association is urged to read carefully this announcement. It is a complete answer to the critics who have continually asked, "What has American medicine to offer as an alternative to a system of compulsory sickness insurance operated by the federal government?" It is of the greatest importance that the individual physician be able to answer that question clearly and authoritatively, and he can do so only by informing himself. We must know equally well what we are *for* as what we are *against*, and be able to state it simply and concisely.

It is unnecessary here to do more than outline the highlights or essential points of the program.

1. The program provides for standards of acceptance for medical care plans by the Council on Medical Service of the American Medical Association. The statement of the Council and the standards established follow:

STANDARDS OF ACCEPTANCE FOR MEDICAL CARE PLANS

Development of plans affecting the distribution of medical care, in accordance with the principles adopted by the House of Delegates, is one of the principal functions of the Council on Medical Service and Public Relations. First in importance in the development of plans affecting the provision of medical care is the utilization of the prepayment method to help spread medical and surgical costs.

The Council on Medical Service and Public Relations suggests that special recognition be granted to plans organized and operated in accordance with standards which adequately protect the interest of the public and the medical profession.

In granting this recognition the Council will consider each prepayment medical care plan in the light of established knowledge, authoritative opinion, and according to standards adopted from time to time by the Council in the interest of the public. Plans that conform with the requirements thus formulated will be accepted by the Council.

Under the conditions defined in the following paragraphs, the Council grants the right to print its seal on all official papers of accepted plans and in any promotional literature or display material used by these plans.

This official seal should appear without comment on its significance unless such comment has been previously approved by the Council. A statement proposed for such use follows: "the seal of acceptance" denotes that (name of plan) has been accepted within the standards set forth by the Council on Medical Service of the American Medical Association.

The acceptance of a plan and the seal of the Council are intended to signify that the plan conforms with or meets the following standards or requirements:

1. *Local Approval.*—The prepayment plan must have the approval of the state medical association—or if local, of the county medical society in whose area it operates.

2. *Professional Control.*—The medical profession should assume responsibility for the medical services included in the benefits; the medical profession is qualified legally and by education to accept responsibility for the character of the medical services rendered.

3. *Arbitration.*—Provision should be made for a medical director acceptable to the county or state medical society, or a committee appointed by either of these groups, to adjust difficulties and complaints. The medical director or committee members may be paid on a per diem basis for the time involved in handling such matters.

4. *Free Choice of Physician.*—There should be no regulation which restricts free choice of a qualified doctor of medicine in the locality covered by the plan who is willing to give service under the conditions established.

5. *Patient-Physician Relationship.*—The method of giving the service must retain the personal, confidential relationship between the patient and the physician.

6.—The plan should be organized and operated to provide the greatest possible benefits in medical care to the subscriber. Honesty of purpose and sincere consideration of mutual interests on the part of the subscribers, the physicians, and the plans are presupposed as necessary considerations for successful operation.

7.—The dues from subscribers through premium rates should be adequate to provide for the benefits offered and the risks involved.

In determining such factors the Council will utilize the experience of those plans that are and have been operating successfully, but will not discourage experiments in other types of coverage provided such experiments are limited in scope and capable of scientific evaluations.

8. *Statement of Benefits.*—These benefits may be in terms of cash indemnity or service units. Where benefits are paid in cash to the subscriber it must be clearly stated that these benefits are for the purpose of assisting in paying the charges incurred for medical service and do not necessarily cover the entire cost of medical service, except under specified conditions.

9.—Subscribers' contracts must state clearly the benefits and conditions under which medical services will be provided or cash indemnities paid. All exclusions, waiting periods, and deductible provisions must be clearly indicated in the promotional literature and in the contracts.

10. *Promotion.*—Promotional activities must be reasonable without extravagant or misleading statements concerning the benefits to the subscribers. In approving promotional material the Council will endeavor to indicate the type of statements which are acceptable and the nature of those considered objectionable. It is not the function of the Council to edit all copy word for word and sentence for sentence, but rather to indicate the general type of revision required in any given piece of literature. It expects the spirit and intent of such objections to be observed in the remainder of the copy not specifically criticized. Promotional activities will include any devices for informing the public or the profession.

11. *Enrollment.*—Enrollment practices shall be based on sound actuarial principles such as will not expose the plan to adverse selection. Group enrollment is recommended until further experience warrants the acceptance of individuals.

12.—It is understood that the plan of organization will conform with state statutes and that the plan will operate on an insurance accounting basis with due consideration for earned and unearned premiums, administrative costs, and reserves for contingencies and unanticipated losses. Supervision should be under the appropriate state authority.

13.—Each accepted plan must submit periodic reports of financial and enrollment experience in the manner prescribed by the Council.

Duration of Acceptance.—Acceptance of plans by the Council will be for a period of two years or until revoked (provided they comply with the standards during this period) at the end of which all contracts and financial statements be re-examined. A shorter period of approval may be granted at the discretion of the Council. Any changes in contracts or literature during the period of acceptance must be submitted to the Council for review.

2. The second action taken in the development of an all-inclusive medical care program was the organization of a voluntary federation of medical care plans which meet the standards of acceptance by the A. M. A. Council on Medical Service. This federation will be known as "Associated Medical Care Plans, Inc." The purpose of this organization will be "to establish coördination and reciprocity among all of these plans so as to permit transference of subscribers from one plan to another and use of the benefits in any state in which a subscriber happens to be located. The organization will also provide consultation and information services based on the records of existing plans and engage in a campaign of public education as to the medical service plan movement under the auspices of state and county medical societies.

3. The third action taken by the Board of Trustees of the A. M. A. was the establishment of a division of Prepayment Medical Care Plans with a director and staff, who will administer the activities of the Council on Medical Service related to the promotion of medical care plans in all of the states.

4. As a capstone to the program, the Board of Trustees re-stated the 14-point program of the American Medical Association, clarifying and dealing specifically with all matters pertaining to the national health, which should be read and carefully studied by every member of the Association. It appears on page 603 of this JOURNAL, under the head of "National Health Program of the American Medical Association."

Announcement of this all-inclusive constructive health program of the American Medical Association, which has been awaited with the greatest interest by all who are concerned with the problem, particularly by members of the American Medical Association, immediately places a responsibility upon the State Medical Association of Texas for decision as to what should be done in Texas.

At present the State Medical Association of Texas is on record by action of its House of Delegates as favoring the development and spread of both commercial and nonprofit medical service plans in Texas which meet certain ethical standards, and do not exploit either the public or the physicians rendering the service.

Further, the Council on Medical Economics has agreed upon certain standards of acceptance for measuring medical service plans operating in Texas, to determine whether they are acceptable. That action is comparable to the action taken by the American Medical Association in this regard.

In order that our House of Delegates may have for its consideration specific recommendations for action on this problem when it meets at Galveston in May, President Dr. H. F. Connally has called a meeting of the Executive Council for March 24 to formulate such recommendations for the House of Delegates. We are at the crossroads. The American Medical Association has laid down

the broad base upon which we as a component unit may build a medical service structure in Texas which will harmonize with and strengthen the program of medical care for the nation.

We must determine whether we shall continue with our present position, whether we shall adopt any existing plan of medical service now operating in Texas, or whether the Association shall promote a plan of its own. The time has come for decisive action.

The Problem of Hospital Cooperatives projected as the result of passage of the so-called coöperative hospital bill in the last, or Forty-Ninth, Legislature of Texas, is now arising to perplex the medical profession in various parts of the state as such coöperatives are perfected here and there. Inquiries are coming to the Secretary of the State Medical Association from doctors in areas where such coöperatives are being formed, wanting to know the attitude of the Association toward these projects. Since no official board, council, or committee of the Association has given judicial consideration to the subject and rendered an opinion, the State Secretary is without anything on which he may base an official expression, except policies and principles of the Association in the past which may be applicable. And the variables of interpretation here make anything he may say at least open to question.

When the bill, which finally became a law, providing for such coöperative hospitals was introduced in the Legislature, considerable effort was expended by the State Secretary to secure an official ruling from constituted authorities as to the attitude the State Medical Association should take, if any, toward this legislation, but without results. In other words, this bill was passed without either the approval or disapproval of the Association.

In defense of criticism whch might reasonably be levelled at such inaction, it should be pointed out that there is virtue in communities recognizing that medical and hospital care are not problems for decision by doctors alone; and that doctors cannot be expected to be interested in locating in isolated rural areas without hospital facilities. The real purpose of the legislation was to provide hospital facilities in rural areas where there was none in order that competent doctors might be attracted to these areas.

To the further credit of the measure in question must be chalked up the fact that the hospital coöperatives are financed by the people living in these communities and not by federal subsidy. None should find fault with that principle.

The fly in the ointment, however, is that some of these coöperatives are not only attempting to build, finance, and operate *places* where physicians may render service to the people, but are proposing with pooled funds to *employ* physicians to render these services. And what is that but a corporation practicing medicine, which is unlawful in Texas?

Now, the medical profession recognizes that there are virtues in pooling funds for prepaid hospital and medical services where needed. It should be the purpose of medicine in Texas not to quarrel with the laudable intentions of these coöperative endeavors but to lend assistance to see to it that the objectionable features are eliminated and that adequate hospital and medical care is available to the people. If provision is made in such enterprises for free choice of physicians in the area served by the hospital; if instead of fixed salaries there is provision for contractual relationship between those rendering the medical service and those served, whether or not there is the intervention of a third party, as provided for in the Principles of Medical Ethics, objectionable features are largely eliminated.

Medicine must be ready to lend a helping hand to farm groups which have had the initiative to help themselves and to see to it that their people have adequate medical and hospital care. Organized farm groups throughout the United States are definitely on record against compulsory sickness insurance. And these groups are an ally of no mean proportion in our effort to prevent the regimentation of medicine and the public.

The Survey of Texas Hospitals and Public Health Facilities, referred to in these columns in the November and December, 1945, numbers of the JOURNAL (pages 337 and 393) as a prerequisite to receiving federal funds under the provisions of S. 191, the Hill-Burton bill pending in Congress, is now under way. Although the ground work has only recently approached the completion stage, Schedules of Information had been mailed to approximately 850 hospitals and related institutions in Texas by March 1. A pilot survey, conducted in Harris, Travis, Wichita, and Galveston Counties, is already in progress. In addition, about fifteen representative institutions have been requested to submit their information prior to the Texas Hospital Association meeting in Fort Worth, March 21 to 23, presumably in order that it may be available for a discussion of the subject at that meeting.

All institutions offering bed care to the sick, either public or private, with the exception of those operated by the federal government, will be surveyed. No effort will be made to evaluate the quality of service rendered; the purpose is to obtain a com-

plete inventory of all health facilities now available in the state as a basis for determining the need of additional facilities. All data collected will be coded so that no names of individuals or institutions will appear in reports submitted in connection with the survey. The coöperation of individual physicians and institutions has been officially requested to insure the success of the survey.

This information was furnished on request by Dr. George W. Cox, State Health Officer. It has been announced that the State Board of Health is the official agency in Texas, appointed by Governor Stevenson, to make the survey. Governor Stevenson also, in compliance with the provisions of the Hill-Burton bill, has appointed an Advisory Council to the State Board of Health, in connection with the survey. The State Medical Association is officially represented on this Council, in the persons of the President and Secretary of the Association, and the chairmen of the Board of Trustees, Board of Councilors, Legislative Committee, Council on Medical Economics, and Public Relations Committee, all of whom were of course appointed by the Governor.

In order that the State Medical Association might be in position to render the greatest possible service in connection with this survey, President Dr. Connally very recently requested each of the 126 county medical societies comprising the Association to appoint or select by whatever procedure they chose, hospital and medical service committees. These committees have been requested to survey carefully the medical and hospital facilities within their respective areas to determine whether or not their people are receiving adequate medical and hospital care and, if not, to advise what is specifically needed to make such care adequate. Requests for information concerning public health facilities available and needs will be made later.

The purpose of the Hill-Burton bill is to stimulate the construction of hospital and public health facilities in communities where they are needed and where such communities can support them after they are established. It is believed that practicing physicians of Texas are especially qualified because of training and experience to render a great public service in connection with this survey. It is the prime purpose of the State Medical Association, through its component county units, to see to it that the best type of hospital and medical care is made available to the people of Texas without discrediting the splendid objectives of the Hill-Burton legislation by encouraging construction of hospitals and public health facilities where they are not needed and can not be supported. Other measures must be utilized for the solution of the medical indigent problem.

The State Board of Health has employed as Director of the Survey it will conduct, Mr. Norman B. Roberts, a former hospital administrator. Mr. Roberts served as a hospital administrator from 1931 to 1942, two years in Kansas City and nine years in Illinois. He was recently separated from Army service, which he entered in 1942 as Registrar of McCloskey General Hospital in Temple, and concluded with one year's service overseas with the 315th General Hospital. He is a member of the American College of Hospital Administrators and the American and Missouri Hospital Associations. He is highly recommended in his special field. He is assured of the hearty coöperation of the State Medical Association in the important task he has undertaken for Texas, and county medical society committees on medical and hospital service are urged to coöperate fully with him.

The headquarters for the Texas State Hospital Survey is located in the State Health Department Building, 410 East 5th Street, Austin 2, Texas.

Annual Session Hotel Reservations this year may be more difficult to secure than ever before in the history of the Association. The reason is well known to all. The nationwide shortage of houses has caused many people to use tourist courts and hotels as permanent places of residence.

Already criticism is being heard from some who are having difficulty securing accommodations at Galveston that representatives of the Island City should not have invited the Association if they could not take care of it. Let us not forget that instead of being critical of these difficulties and embarrassments, we should remember our indebtedness to Galveston as the single city in Texas which was able to make any pretense whatever of entertaining the Association in 1946. The four largest cities—Houston, Dallas, San Antonio, and Fort Worth—all of which were canvassed with regard to the matter, hastily and plainly stated that it would be absolutely impossible for them to provide the necessary meeting places, much less to furnish rooms for guests.

Added to the shortage of transient accommodations is the fact that Texas doctors are eager to attend an annual session, not only for its scientific value, but to see friends with whom they have not fraternized during the long hard war years. So we may be assured that all who can find places to stay will be there for a part if not all of the four-day session.

We are publishing herewith a list of Gal-

veston hotels and first class tourist courts with their rates. Those who have not yet made reservations for the Annual Session, May 6, 7, 8, and 9, should do so without delay. We publish the names of the Galvez and Buccaneer Hotels for courtesy only and in appreciation of their generosity in furnishing meeting places for both the State Medical Association and Woman's Auxiliary. We are advised that all rooms in these two hotels have been reserved for many weeks. The list follows:

GALVESTON HOTELS

Hotel	*Rates*
Buccaneer	
Galvez	
Jean LaFitte	Double, $3.75-$6.00

GALVESTON TOURIST COURTS

Court	*Rates*
Coronado	2 persons, $4.00 1-bedroom apt. (for 2), $4.65 2-bedroom apt. (for 2 or 4), $6.70
Jack Tar	double room, $4.50-$6.50 2-bedroom apt. (for 4), $10.85-$12.50 1-bedroom apt. (for 2), $6.50
Miramar	2 persons, $3.65-$4.65 2-bedroom apt. (for 2 or 4), $6.00

Because of the shortage of rooms, reservations for single accommodations cannot be made. Time and effort will only be wasted in asking for them. All are urged to accept in good spirit the necessity for double accommodations.

For those who experience difficulty in finding suitable accommodations for the Annual Session we again publish the names of the Hotels Committee at Galveston. They will do their best to meet all demands made upon them.

HOTELS COMMITTEE

Dr. E. S. McLarty, Chairman, 22nd and Avenue I.
Dr. Hamilton Ford, John Sealy Hospital.
Dr. Emil Klatt, 324 21st Street.
Dr. Charles F. Mares, 320 21st Street.
Dr. N. Prujansky, 2201 Avenue D.

We are indebted to Galveston County Medical Society, the hotels of Galveston, its Chamber of Commerce, and its citizenship, who propose to do their best to entertain us despite any and all handicaps. We have no doubt but that the 1946 Annual Session will be an outstanding one.

Confusion Regarding Wagner-Murray-Dingell Bills.—Apparently the fact that there are two bills pending in Congress, calling for a system of compulsory sickness insurance to be operated by the federal government, both of which are authored by Senators Wagner and Murray in the Senate and Representative Dingell in the House, is causing some confusion and misunderstanding. Advantage has been taken of this situation by a socialistically minded layman who wrote "to the editor" of a newspaper complaining bitterly that an advertisement placed in a newspaper by a public spirited group warning the public against the harmful provisions of the original Wagner-Murray-Dingell bill, introduced in the beginning of the present Congress, is misleading, incorrect, and implying deliberate falsification. He pointed out that the advertisement referred to states that the bill contained no provisions for venereal disease control, tuberculosis, or the indigent, and asserted vigorously that this is not so, giving the chapter and verse in the bill which do make such provisions.

The advertisement complained of, of course, was perfectly correct. It was directed at the Wagner and Murray bill now reposing in the Finance Committee in the Senate, and the Dingell bill in the Ways and Means Committee in the House.

Our socialistic friend was referring to the second Wagner-Murray-Dingell bill introduced in the present Congress. There was no need whatever for the provisions in the second Wagner-Murray-Dingell bill for venereal disease control or tuberculosis. Adequate authority already exists for Congress to appropriate money for these purposes, under Section 601, Title VI of the Social Security Act (Public Law, Title 42, Section 246). In the annual Public Health Report for 1944 it is stated that payments to the states for general health work under Title VI of the Social Security Act totaled $10,000,000 and in addition, for the control of the venereal diseases, $9,700,000. Legislation approved July 1, 1944, (Public Law, Title 42, Section 246 (b)) made available to the Public Health Bureau an appropriation of $10,000,000 for the fiscal year of 1945 for tuberculosis control. Therefore these two sections of the Wagner bill contribute nothing new. Part C of the bill, providing for grants to states for medical care of needy persons, is the only really new material of Title I. All the other sections might be said to have been used as window dressing for Title II.

It should be further said that there is no specific provision of funds for the needy in the second Wagner-Murray-Dingell bill, but the vague reference thereto seems to indicate that what would be available is only a drop in the bucket in comparison with the tremendous contributions made voluntarily each year by the medical profession of this country in free medical service to the indigent. Whenever Congress seriously wants to do something about the problem of medical indigency to permit the public to share this responsibility with the medical profession, it will find American medicine

ready to coöperate fully, and perfectly willing to lead the way.

Dr. Stirling E. Russ, the son of Dr. and Mrs. W. B. Russ of San Antonio, well and favorably known in Texas because of his record of accomplishment as a successful surgeon, whose obituary appears in this number of the JOURNAL, has been memorialized fittingly by his parents in the gift of a $1,000 war bond to the Texas Memorial Medical Library, the library of the State Medical Association of Texas.

The fund established by this gift will be named the "Dr. Stirling E. Russ Endowment Fund." While the exact value of the bond will be carried on the books from year to year, when the bond matures, it will be reinvested by the Board of Trustees, thus perpetuating the fund, and only the interest therefrom will be expended in development of the library.

All of us who know the father of Dr. Stirling E. Russ, which includes nearly every doctor in Texas, grieved with him and Mrs. Russ over the loss of a son in the prime of manhood and with such rich promise of a fine and full career in the footsteps of his distinguished father.

Time and faith alone can assuage the pain and sorrow caused by the passing of those dearest to us. Man has always expressed his love in monuments of stone or in objects of beauty to perpetuate the memories of those he holds dear. No monument or painted window, however beautiful, will more surely perpetuate the memory of Dr. Stirling E. Russ or serve mankind more fittingly than will this endowment fund established in his name, which will annually be brought to the attention of doctors of Texas with an accounting of the expenditures made possible in the development of the library. That thought in itself is a solace to those bereaved. Medicine in Texas will continue to be served in the name of Dr. Stirling E. Russ.

Cancer Control in Texas should receive a distinct impetus as a result of the distribution recently of a Cancer Manual by the M. D. Anderson Hospital for Cancer Research, to each member of the State Medical Association, including all military members who have not yet been separated from the armed services. The manual was compiled and edited by Miss Helen T. Konjias with the aid of members of the clinical and consulting staffs of the hospital and in accordance with suggestions from outstanding authorities in the field of cancer.

Foremost credit in connection with the development of the Cancer Hospital must be given to Dr. E. W. Bertner of Houston, Acting Director of the institution since its establishment by the State Legislature. The first manuscript for the manual was prepared under the direction of Dr. Bertner, whose tireless energies and abilities have been given unstintedly to the development of the Cancer Hospital and the Texas Medical Center in Houston of which it is a part.

The purpose of the manual is "to bring to the attention of the general practitioner of Texas a brief description of the more recent methods in the diagnosis and treatment of cancer." And this it adequately does. Beginning with a brief discussion of the cancer problem today, causes, and methods of prevention as far as they are known, the most promising recent aids in early diagnosis are critically reviewed. A concise discussion is given of cancer as it occurs in all of the various organs and tissues of the body with the most useful methods of detection and the most successful forms of therapy in each location and type of malignancy.

Dr. Bertner has contributed a chapter which details the highlights of the cancer control program in Texas and projects with far-reaching vision its potentialities for the future in cancer treatment, research, lay and professional education on the subject, both for general practitioners, medical specialists, and nurse specialists in the cancer field, with emphasis on all procedures which will reduce the mortality and prevent the disease now credited as third in importance in Texas as a cause of death.

Any member of the Association who has failed to receive a copy of the Cancer Manual should at once communicate with the M. D. Anderson Hospital, 2310 Baldwin Street, Houston 6, Texas.

Dr. Bertner as Acting Director of this institution and the staff, with Miss Konjias, are to be commended for the production and distribution to Texas physicians of this excellent brochure on cancer.

Corrections.—In listing the names and addresses of officers of each of the scientific sections in an editorial entitled "The 1946 Annual Session" in the January, 1946, number of the JOURNAL, page 443, the address of Dr. Burbank Woodson, secretary of the Section on Eye, Ear, Nose, and Throat, was erroneously given as Woodson Hospital, 312 West Avenue G, Temple, Texas. Dr. Woodson's correct address is Professional Building, Temple, Texas. The JOURNAL regrets the error and any inconvenience it may have caused.

Opportunity is taken here to advise of the change of address of the chairman of the Section on Public Health, Dr. George Gray, since publication of the February JOURNAL.

Dr. Gray's present address is Health Unit, City Hall, San Angelo, Texas.

County Society Reports Are Due April 1, and the membership as set up in those reports will be the actual membership of the societies concerned for the year 1946, except that membership may be renewed at any time during the calendar year by the simple expedient of paying dues. The only effect such a lapse in membership will have on the individual member will be in connection with Medical Defense, and that may or may not be important.

It should be remembered that Military Membership expires immediately after those who hold such memberships enter private practice.

The State Association membership on March 1, 1946, was as follows:

Regular Members	2,209
Honorary Members	14
Intern Members	28
Military Members	29
Members Emeritus	3
Total	2,283

The State Association membership on March 1, 1945, was as follows:

Regular Members	2,041
Honorary Members	12
Intern Members	13
Military Members	239
Members Emeritus	3
Total	2,309

CURRENT EDITORIAL COMMENT*

W. B. Cannon (1871-1945), Physiologist and Physician.—Dr. Walter B. Cannon died on October 1, 1945. It is difficult to convince oneself that the human dynamo of productiveness and influence represented by that name is no more. Although he had retired and was in his seventies, the dynamo kept humming at top speed to the end. He spent last summer at the Institute of Cardiology in Mexico City, carrying on research with such enthusiasm that his wife reports he could not be induced to leave the laboratory even to visit a new born volcano!

He made his first suggestion of a research program to me in 1909, his last thirty-two years later in 1941, as timely and stimulating as the first. Last year when I listened to his last lecture to a Harvard physiology class, I thought it the best lecture to students I ever heard him give, his mind as clear and vigorous as ever.

It is significant that Cannon's first semi-popular book was entitled "Bodily Changes in Pain, Hunger, Fear and Rage,"[1] all of these requiring consciousness. Cannon was among the first to emphasize with solid scientific proof the therapeutic importance of taking into account the patient's consciousness and personality.

Another book he entitled "The Wisdom of the Body,"[2] appropriating this title from a lecture of Professor Starling, because he agreed with Starling that only by understanding the wisdom of the body can we attain that "mastery of disease and pain which will enable us to relieve the burden of mankind." The title illustrates Cannon's essential optimism. He focuses his attention not on the imperfections of the human body but upon its inherent excellencies. The last chapter in the book is an epilogue on social homeostasis. He is optimistic not only about the body but about the race, pointing out the various factors which operate to produce social stability. One might add that one of the most powerful of these stabilizing factors is the existence of men with an enlightened optimism such as Cannon had!

A list of his contributions to fundamental physiology would cover some thirty pages. In his last book, "The Way of An Investigator,"[3] he tells how his interests developed from digestive functions, through studies of emotional effects on bodily processes, to regulation of steady states in the body, each research following "hunches" suggested by the preceding. But in spite of his devotion to the laboratory his interests were not narrow. His friendship for the physiologist Juan Negrin led eventually to his becoming national chairman of the Medical Bureau to Aid Spanish Democracy. He was also president of the American Soviet Medical Society and active in United China Relief.

His work was early threatened by antivivisectionists whose baleful influence he vigorously and effectively combated for many years. These crusades were not without their penalties. "You should be tarred and feathered and I would like to help do it," he was once told.

Emerson said, "There is no History, only Biography." The history of American physiology and medicine for the last forty-five years will be heavily weighted with the biography of Walter B. Cannon.

REFERENCES

1. Cannon, W. B.: Bodily Changes in Pain, Hunger, Fear and Rage, New York, D. Appleton and Company, 1915.
2. Cannon, W. B.: The Wisdom of the Body, New York, W. W. Norton and Company, Inc., 1932.
3. Cannon, W. B.: The Way of An Investigator, New York, W. W. Norton and Company, Inc., 1945.

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*This department of the JOURNAL presents editorial comments on current items pertaining to the science, art and practice of medicine, contributed by members of the State Medical Association and scientists closely associated with the medical profession of Texas. Invitation is hereby extended to any member of the State Medical Association of Texas to submit such discussions for this department. The discussions should not be more than 500 words in length.

TUMOR SEMINAR*

CONDUCTED BY
ARTHUR PURDY STOUT, M. D.
Associate Professor of Surgery, Columbia University, College of Physicians and Surgeons, New York City.
NEW YORK, N. Y.

Dr. B. F. Stout, San Antonio, presided as chairman of the meeting.

Dr. B. F. Stout: First, I want to make a few preliminary remarks. Three years ago the San Antonio group of civilian pathologists and the Army pathologists organized a group for tumor study. We have met every year from October to June, every two weeks. By so doing, we have pooled our resources, and it goes without saying we have learned a great deal from each other. Moreover, we have had the benefit of discussions among ourselves. Most of our difficult material has been referred to the Army Medical Museum for diagnosis and a great deal of it to Dr. A. P. Stout, of New York. A year ago last May we had a tumor seminar, which we put on for the benefit of the Section on Pathology of the Texas State Medical Association which many of you attended and heard Dr. Stout conduct that session. This year, owing to travel difficulties, we were a little worried about the chances of putting over this tumor seminar, but things cleared up in time; Dr. Stout consented to come down for the meeting, for which we are all very grateful, and we were so happy that we wanted to share our good fortune with the other pathologists of the state and the Army.

Now I want to present Dr. Arthur Purdy Stout, Surgical Pathologist of the Presbyterian Hospital and Associate Professor of Surgery of the College of Physicians and Surgeons, Columbia University, New York.

Dr. A. P. Stout: It is a very great pleasure to be here with you again, and I feel much honored that you liked the last seminar well enough to have me come back. I think in many ways the group of cases for study this time is better selected for discussion, because I believe we can arrive at a diagnosis in a majority of them, and there were several last time that had to be left up in the air because the data were insufficient for us to reach any conclusion. I will explain first how we will conduct this session. I will announce either 2 or 3 cases for your study and five minutes will be allowed for each case. At the end of that time, if you wish to you may write down your own diagnosis in the space provided for it. In order to save time the various diagnoses will not be read; instead, I will give first a summary of what I learned from studying the cases and then a discussion of the differential diagnosis and an outline of the treatment and the expected results of treatment so far as I know anything about them. Then I hope that those of you who differ and want to take issue with me will do so. We can only learn by having a free-for-all discussion in which the various features of these sections can be brought out. And I hope, if you wish to, you will ask me questions. Where it seems advisable, I will have photomicrographs, which I brought down with me, thrown on the screen to illustrate what I am talking about. I do not think it will be necessary in many of them, but perhaps it will help with some. We will now take Cases 1 and 2.

CARCINOID TUMOR OF RECTUM

Case 1

History (presented by Dr. A. O. Severance, San Antonio).—The patient, a woman, aged 33 years, complained of vaginal bleeding, but a language handicap resulted in a rectal examination at which time the doctor found a small polyp. It turned out that the bleeding was due to retained placental tissue, and so a dilatation and curettage was done.

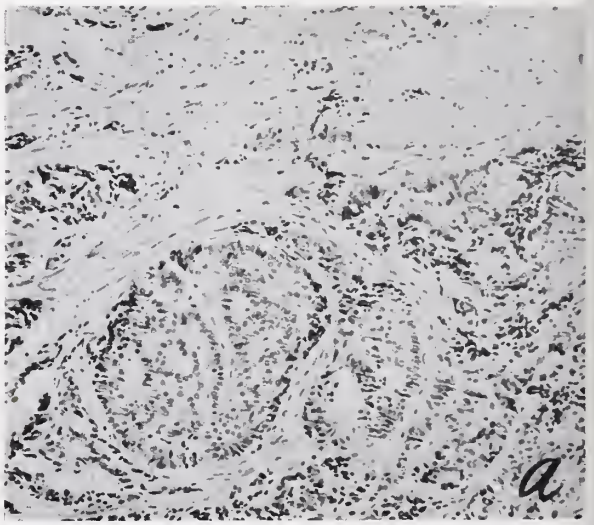

FIG. 1. (Case 1)—Carcinoid tumor of the rectum. The tumor cells in the center form twisted cords and an occasional rosette but no acini. The dark cells are degenerate. Above is the muscular mucosae. x 120.

The rectal nodule was also removed. It was a sessile, elevated tumor 1 cm. in diameter, covered by a glistening mucosa except for a hole caused by attempts at previous office biopsy. The cut surface is firm and gray, and the tumor is in the submucosa and is 6 mm. in diameter. The base of the biopsy specimen is 15 mm. in diameter.

*EDITOR'S NOTE.—The tumor seminar conducted by Dr. Stout was presented in San Antonio, October 6, 1945, under the sponsorship of San Antonio and Brooke General Hospital pathologists, who furnished the material for study. Twenty-five tumors were considered. Forty pathologists from throughout Texas and adjoining states were participants in the seminar.

Each pathologist was furnished a case history and slides for each tumor. Dr. Stout gave a microscopic description and then commented on each tumor. A general discussion conducted by Dr. Stout was finally held. In most instances 2 or 3 cases were grouped for discussion. In this report if the discussion of a tumor fails to follow immediately the case history, microscopic description, and comments of Dr. Stout, it will appear following the first or second case thereafter.

Dr. A. P. Stout: *Microscopic Description* (Fig. 1).—The tumor lies in the submucosa, sending some prolongations in the muscularis mucosae and reaching the deeper part of the mucosa. It is made up of nests of tumor cells, the majority of which are rounded or form truncated cones. They sometimes form rosettes and occasionally twisted ribbons with the cone-shaped cells so arranged that the broad end of one cell lies against the apex of its neighbor. Their cytoplasm is finely granular and faintly acidophilic.

Comment.—This is a rare situation for a carcinoid tumor. The writer has seen 7 in the rectum, including this case, and there are records of at least 7 other reported cases. Of the 14, 2 are known to have been malignant. In my experience, although there is no way histologically to differentiate benign from malignant carcinoid tumors, the small tumors limited to the mucosa and submucosa have always been benign. The one exception is a very tiny carcinoid in the rectum of a 71 year old male reported by Siburg that produced widespread metastases. This is so contrary to the general experience that I feel it should not influence one to subject a patient, from whose rectum a small carcinoid tumor has been removed, to radical surgery. One should be alert for the recognition of a carcinoid tumor of the rectum and sigmoid so as not to confuse it with an undifferentiated carcinoma and mislead the surgeon with such a diagnosis. It is generally agreed that the carcinoid tumors are derived from the peculiar cells scattered as units among the mucus-secreting cells of the crypts of Lieberkuhn which are pyramidal in shape and have a nucleus elevated to the middle of the cell by the presence of granules in the base. These granules ordinarily are fluorescent in ultraviolet light, give a positive diazo reaction, and become blackened by ammoniacal silver nitrate. But, as Erspamer has pointed out, there is a stage in their formation when the granules although present have not yet acquired the specific substance necessary to give the above reactions. If it is assumed that the tumor cells lack Erspamer's specific substance and are in the pre-enterochrome state, as it is called, an acceptable explanation is provided why so many of the carcinoid tumors fail to have their granules blackened by ammoniacal silver nitrate as was true in this present case.

REFERENCES

1. Helwig, E. B.: Benign Tumors of the Large Intestine, Incidence and Distribution, Surg., Gynec. & Obst. 76:419 (April) 1943.
2. Siburg, F.: Uber einen Fall von Sogenanntem Karzinoid des Rectums mit ausgedehnten Metastasenbildung, Frankfurt. Ztschr. f. Path. 37:254, 1929.
3. Stout, A. P.: Carcinoid Tumors of the Rectum Derived from Erspamer's Pre-enterochrome Cells, Am. J. Path. 18:993, (Nov.) 1942.

ADENOMATOUS POLYP OF THE RECTUM IN A CHILD

Case 2

History (presented by Dr. H. J. Schattenberg, San Antonio).—A white male child, aged 2½ years, evidenced rectal discomfort and bleeding. On proctoscopic examination a tumor mass, 1 by 1.5 cm., was noted well above the internal sphincter, attached to the wall of the rectum by a broad base. The external surface of this tumor appeared quite hemorrhagic. On section, a number of cystic spaces and what appeared to be dilated vascular structures were noted.

Dr. A. P. Stout: *Microscopic Description* (Fig. 2).—The slides show the cross section of a tumor composed of well differentiated but neoplastic mucous glands in which the

FIG. 2. (Case 2)—Adenomatous polyp of the rectum in a child. x 120.

lining cells maintain the basal polarity of their nuclei and many of them secrete mucus. The surface of the growth is ulcerated and covered with granulation tissue. The section does not show the relationship of the tumor to the rectal mucosa.

Comment.—The question of the relationship of adenomatous polyp of the rectum in children to cancer is unknown, so far as I am aware, except in the rare cases of multiple familial polyposis of the rectum and colon which can confidently be expected to develop several cancers in the third decade of life or before. It is well known that both polyps and, rarely, carcinomas can develop in the rectums of children. I have never seen an adenomatous rectal polyp in a child which showed carcinomatous changes. The neoplastic adenomatous polyp which approaches the borderline of malignancy or has passed it, in vivo has a dusky reddish appearance. Those polyps which have the same color as the surrounding mucosa are always

benign. In the case under consideration the red color is due to ulceration of the surface and therefore has to be discounted. Those tumors which show microscopic carcinomatous changes but which are pedunculated, with the pedicle made up of normal rectal mucosa, in my experience do not need any further treatment. They are cured by the excision. Those tumors which are sessile and show carcinomatous changes, even though they are well differentiated and have not penetrated through the muscularis mucosae, are definite carcinomas, and if the surgeon chooses to treat them by simple excision and not radical resection, there is some risk of failure to cure, since I have found metastases in the regional nodes in a case showing these features. It sometimes happens that a rectal biopsy shows neoplastic glands which are well differentiated so that one is uncertain whether the lesion is benign or malignant because its base is not shown. In such a case I advise the surgeon that if the lesion has the clinical characteristics of carcinoma, it should be treated as such, but if it does not, then another biopsy should be taken to show the relationship of the tumor to the rectal wall.

REFERENCES

1. Helwig, E. B.: Benign Tumors of the Large Intestine, Incidence and Distribution, Surg., Gynec. & Obst. 76:419, (April) 1943.

2. Raiford, T. S.: Carcinomas of the Large Bowel. Part I: The Colon; Part II: The Rectum, Ann. Surg. 101:863 (March) 1935, 1042 (April) 1935.

3. Yeomans, F. C.: Carcinomatous Degeneration of Rectal Adenomas, Report of 7 Cases, J. A. M. A. 89:852 (Sept. 10) 1927.

DISCUSSION OF CASES 1 AND 2

Dr. Ellen Furey, Beaumont: I wish you would repeat what you said about the adenomatous polyp type—about the question of malignancy. I have seen several lately and I want to get that straight.

Dr. A. P. Stout: So far as my reading and experience go, I do not know of any case of solitary adenomatous polyp in a child which became malignant. All of the ones which I have encountered have been benign. They are called to attention because they bleed; they are usually taken out and that is the end of it. One can expect cancer to develop in the case of multiple familial polyposis.

Dr. A. O. Severance, San Antonio: I should like to have you comment on a possible question that may arise in the minds of some of the physicians present in regard to the question of malignancy of a carcinoid tumor which shows tumor cells invading the mucous membrane. Some of them might not like to let a possible malignant tumor ride by as a benign one.

Dr. A. P. Stout: I think it is well known that the histological picture of the benign and malignant carcinoid tumor is the same, so that just by looking through the microscope it is not possible to tell the benign tumor from the malignant one, and we have to fall back on experiences of the behavior of such tumors. All, I am sure, have found small carcinoid tumors in the mucosa and submucosa of the intestinal tract at autopsies and since no metastases are present it is assumed they are benign. We know that this is true of the appendix, especially where the cells grow right through the muscle to reach the subserous layer and yet do not otherwise behave in a malignant fashion. I have never seen a malignant carcinoid of the appendix, although some have been reported. In my experience, when a carcinoid tumor in regions other than the rectum and lower sigmoid grows to such a size that it gives symptoms of obstruction or bleeding, it will prove invariably malignant, and carcinoid tumors are fatal when they become malignant. They are slow to kill but they kill almost inevitably because they metastasize to the regional nodes and usually to the liver. The metastasis grows very slowly and it may be a period of years before the patient dies, but in every case I have encountered where the tumor was above the lower sigmoid and gave clinical symptoms, it had metastases and killed the patient. In the rectum and lower sigmoid the situation is different because there it is possible to see the tumor through a sigmoidoscope, and in that way a very small asymptomatic tumor, such as this one, can be discovered clinically. But such a small tumor in my estimation should not be called malignant in spite of the fact that there is one very small size reported that metastasized. I regard that case as a rare exception, and I would be unwilling to recommend an abdomino-perineal resection for these small carcinoid tumors.

Dr. H. J. Schattenberg, San Antonio: Getting back to the adenomatous polyp, if this were in a patient up in years—a little bit older—the histology being identical, might the interpretation be a little different?

Dr. A. P. Stout: In my estimation I still think it would be a benign adenomatous polyp. There is one feature of the slide which perhaps might leave one in doubt and that is that the section has been transversely so we do not see the base of the tumor and we do not know what relationship it bears to the muscle wall and submucosa. In spite of that I do not, personally, consider this tumor malignant. The cells appear too well differentiated and the nuclei orientated toward the basal pole. The majority of them are mucus secreting and they do not appear to me like malignant tumor cells.

PAPILLARY CYSTOADENOMA OF THE TONGUE

Case 3

History (presented by Dr. A. P. Stout).—A woman over 50 years old, a patient in the Rockland State Hospital, N. Y., was under treatment for an involution psychosis. She developed a tumor in the floor of the mouth and under the surface of the tongue in the midline. During the preceding few months it grew, doubled in size in the last month, attaining a diameter of 3 cm., and was pedunculated. It was encapsulated and was excised. No tumor was found in any other part of the body. (Contributed by Dr. G. Eros, New York, N. Y.)

Dr. A. P. Stout: *Microscopic Description* (Fig. 3).—Sections show that the growth is composed of numerous large cavities and spaces lined by tall columnar cells with nuclei arranged either in the basal pole or in the middle of the cell. The cells are often thrown up into papillary processes which have a slender central core of vascular fibrous tissue. A few of the cells contain in the

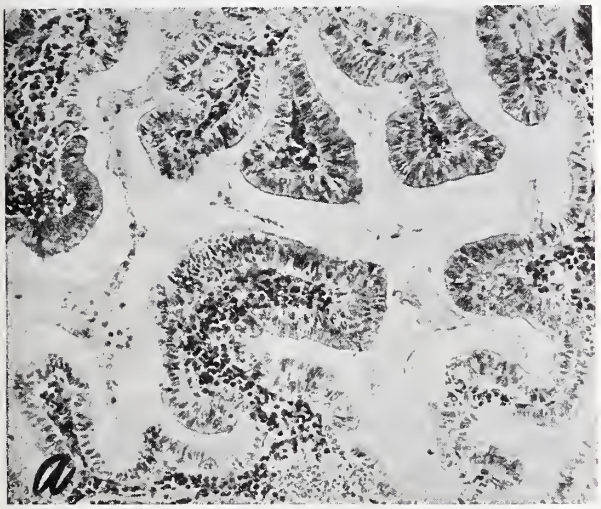

FIG. 3. (Case 3)—Papillary cystoadenoma of the tongue. x 120.

apical pole a very small amount of mucicarminophilic material. In the majority of the lumens is a material which somewhat resembles colloid but which is usually less homogeneous. The resemblance to colloid is accentuated occasionally by the fact that where the material comes into contact with the cells it shows slight marginal vacuolation. The cells frequently grow up to the covering squamous epithelium and sometimes actually unite with it. In some areas there has been surface ulceration, with disappearance of the mucous membrane. The tumor maintains its good differentiation in all parts. The stroma shows a considerable degree of inflammatory cell infiltration and in some places it consists of very edematous fibroblastic tissue accompanied by many capillaries.

Comment.—This is obviously a differentiated papillary glandular tumor of unusual appearance. From the clinical aspect the question of greatest importance is to decide whether it is primary or metastatic. Unfortunately the lack of follow-up data and autopsy do not enable one to decide this point beyond peradventure. I am of the opinion that it is not metastatic because I believe that such a well differentiated papillary tumor should betray its source if metastatic. It has some resemblance to the gastro-intestinal tract carcinomas and I would be unwilling to exclude this as a possibility. However, I suspect that it may have developed from the mucous and serous glands of the region since we have records in the Laboratory of Surgical Pathology of Columbia University of one other papillary cystic tumor whose lining cells resemble the ones found in this tumor and which was obviously associated with these glands. This cystic growth was 1 cm. in diameter and was removed from the anterior pillar of the fauces of a 50 year old woman. It is difficult to find references to such tumors. Bolognesi in 1926, in discussing the adenomas of the tongue, found that they are apt to develop in the posterior part of the tongue at the side from the glands of Weber or on the antero-inferior aspect from the glands of Blandin or Nuhn. An adenoma of aberrant salivary glands at the base of the tongue was described in 1928 by Scalone, and Toyama in 1927 reported a gastric gland adenoma at the base of the tongue. Whether or not any of these are strictly comparable with this case I am uncertain. The tumor has certain resemblances to the papillary cystadenoma lymphomatosum but, of course, lacks the lymphoid tissue and the usual acidophilic granules in the epithelial cells. The question of whether this is a benign or malignant primary papillary tumor also arises. It is impossible to determine such a question on histological grounds alone and it must therefore be left undecided.

REFERENCES

1. Bolognesi, G: L'Adenome de la Langue, Les Néoplasmes 5:5, 1926.
2. Scalone, I.: L'Epitelioma Glandolare della Lingua, Ann. Ital. di Chir. 7:397, 1928.
3. Toyama, T.: Ueber das Vorkommen von Magenschleimhautinsel an der Zungenwurzel, Kyoto Ikadaigaku Zasshi 1:33, 1927.

MIXED TUMOR OF MUCOUS MEMBRANE OF CHEEK WITH CYLINDROMATOUS AREAS

Case 4

History (presented by Dr. John M. Moore, San Antonio).—Mrs. V. R., age 65, a native of Mexico, about three months ago developed a lesion on the buccal mucous membrane of the right side of the

mouth. For the past few weeks she has received local treatment but the lesion has become more extensive rather than healing. The tumor was excised June 12, 1945, for tissue diagnosis.

Dr. A. P. Stout: *Microscopic Description* (Fig. 4).—The sections show that there is a tumor covered with intact mucous membrane. It is made up of groups of glandlike structures, many of which contain central plugs of mucin in their lumens. Almost all of the growth is made up of this form of tissue, but in places the intervening stroma is myxoid and approaches the appearance of immature cartilage. The tumor is circumscribed but it infiltrates close to the mucosa.

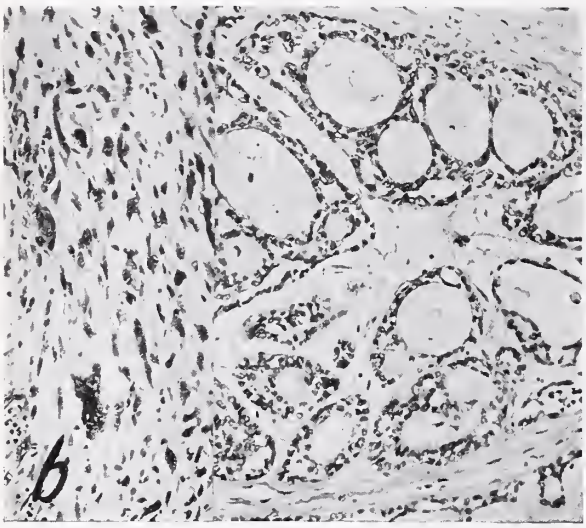

FIG. 4. (Case 4)—Mixed tumor of the parotid salivary gland. At the right are groups of epithelial cells containing rounded spaces plugged with mucus, producing the so-called cylindromatous effect. At the left is a myxoid area. x 120.

CARCINOMA (CYLINDROMA) OF PAROTID SALIVARY GLAND

Case 5

History (presented by Dr. A. O. Severance, San Antonio).—Mrs. W. O. F., age 62 years, a white woman, was first examined by her doctor in October, 1940, complaining of vaginal bleeding, backache, and protrusion of the bladder from the vagina. In the course of examination she mentioned a lump under her right ear. The lump was thought to be in the parotid gland. The blood test for syphilis was negative. An otolaryngologist was consulted and advised that the lump amounted to nothing. The patient was operated on for her gynecological trouble and was followed up from time to time but made no mention of the lump under her right ear until April, 1945. At this time the mass was markedly enlarged, nodular, and tender. The same otolaryngologist again saw the patient and this time considered it a malignant tumor with no obvious source elsewhere which might be primary should this be a metastasis. At operation April 16, 1945, the mass was removed and was found unencapsulated and extending down along the carotid vessels and beneath the styloid process. The surgeon thought he did not get out all of the tumor. In deep roentgen-ray therapy 2,100 r was given over this right parotid area. As of September, 1945, there is no recurrence. The specimen measured 4.5 by 3.5 by 2.4 cm. The cut surface was moderately firm, glistening gray with an area of dark brown and with small areas of hemorrhage.

Dr. A. P. Stout: *Microscopic Description* (Fig. 5).—Sections show a tumor that is made up in almost all parts of solid masses of epithelial cells which form many rosettes or glandlike spaces, sometimes containing mucin and sometimes empty. Occasionally, isolated tumor glands are found in the fibrous stroma. Where the tumor is in contact with the parotid glands, it infiltrates it. There is a great deal of organized lymphoid tissue associated with the tumor where it invades the parotid. In some areas this appears like parotid lymph gland. No evidence of mixed tumor can be found.

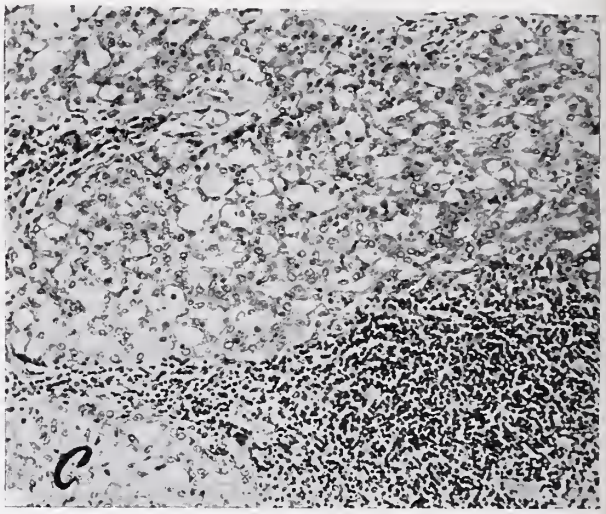

FIG. 5. (Case 5)—Cylindromatous carcinoma of the parotid salivary gland showing association of lymphoid tissue and carcinomatous cell masses with rosettes. x 120.

Comment.—It is very difficult to compress into a short space a comprehensive discussion of the tumors of the mucous and salivary glands because there exist such divergent views about their origin, composition, degree of malignancy, and treatment. Without prejudice to dissenting views, the following brief summary represents, I believe, the ideas concerning them held by the majority of students and with which I agree. The common tumors are called adenoma (including cystoadenoma lymphomatosum), mixed tumor, and carcinoma. All of these tumors are epithelial derivatives from the mucous and salivary glands of the upper alimentary and respiratory tracts, including the bronchi. The myxoid and cartilaginous tissues of the mixed tumors are supposed to result from metaplasia of the epithelial cells. The cellular origin of the occasional mixed tumors of

salivary type found in parts of the body other than the head and neck is unknown.

The vast majority of the adenomas and mixed tumors are benign in the sense that they do not metastasize. Ahlbom and others divide the mixed tumors into two groups: benign and semimalignant. The semimalignant tumors grow faster, are not encapsulated, tend to infiltrate, and microscopically are largely epithelial with little or no myxoid and cartilaginous metaplasia. But the studies of McFarland convince him that it is not possible to predict malignancy from the histological appearance of a mixed tumor, and this has been our experience. Moreover, in our records (table 1) there is actual microscopic proof of metastasis of only 2 of the 392 mixed tumors recorded. I have not studied the records of all of the others so that I cannot say whether or not there was clinical proof in any of them. Judging from Ahlbom's and Mulligan's experience it is quite possible that there may have been. However, the fact remains that it is a very uncommon event so that if one chooses to speak of "semimalignant" mixed tumors, it should be largely with the connotation of local infiltrative growth rather than metastasis.

TABLE 1.—*Tumors of Mucous and Salivary Glands* (Laboratory of Surgical Pathology, Columbia University).

Mixed tumor	392
Adenoma	26
Other benign tumors	6
Carcinoma	68
Lymphosarcoma	12
	504

The anatomical distribution of the 392 mixed tumors is much the same as in the experience of others but it may be of interest to you to record it. (See table 2.)

TABLE 2.—*Anatomical Distribution of 392 Mixed Tumors of Mucous and Salivary Glands* (Laboratory of Surgical Pathology, Columbia University).

Salivary glands (parotid 227, submaxillary 37, sublingual 1)	265
Palate	64
Lips (upper 16, lower 2)	18
Rest of oral cavity and pharynx	11
Nares, sinuses, and nasopharynx	7
Bronchus	1
Lacrimal gland	6
Head and neck	16
Other regions	4

The other benign epithelial tumors recorded include 25 adenomas (of which 19 were papillary cystadenoma lymphomatosum) and one true oncocytoma, that is a tumor made up of cells resembling the strongly acidophilic granular cells found in the salivary ducts. During the same period of time there were 68 carcinomas and epitheliomas including 54 primary in the salivary glands (parotid 41, submaxillary 10, and sublingual 3) and 14 in the upper respiratory tract and oral cavity. The large majority of these were very destructive; many metastasized and very few of those treated had five year cures. Aside from the primary epithelial tumors, there are records of only 18 other tumors: 3 hemangiomas, 1 leiomyoma, 1 lipoma, 12 lymphosarcomas, and 1 undiagnosed tumor. The tumor which poses the most difficult problem in therapy is the mixed tumor of the parotid because damage to the branches of the facial nerve results in a deformity which often is more disfiguring than is the swelling of the parotid. The mixed tumor is very radioresistant so that it cannot be cured by this method.

After long observation I have come to the opinion that one should remove mixed tumors as extensively as may be without injuring the facial nerve but that it is better for the patient to risk recurrence of the tumor than to have facial nerve palsy. Recurrences usually come slowly and may either be removed or ignored. In other situations excision can usually be adequate without producing a distressing deformity. When the tumor is a definite carcinoma, the facial nerve has to be disregarded and a radical removal carried out. This statement applies to all varieties of carcinomas except to the so-called cylindromatous carcinoma or cylindroma since this tumor is less radioresistant than the others and a few of them have been successfully treated by radiotherapy, especially those appearing in the upper respiratory and alimentary passages. The cylindroma is an infiltrating form of carcinoma in which the small tumor cells tend to be arranged around cavities filled with a plug of mucus. One has to be careful to distinguish this true carcinoma from some of the mixed tumors in which numerous juxtaposed glands plugged with mucus may be found. In the mixed tumor there will always be other areas in which can be found the more familiar features of the mixed tumor, as is true of Case 4, whereas in the cylindromatous carcinoma this feature will be absent.

In conclusion, I should classify the tumor of the cheek as a mixed tumor with cylindromatous areas. If one wishes to divide these into benign and semimalignant groups, this would belong to the semimalignant division because it infiltrates. The parotid gland tumor should be classified as a carcinoma because it is purely cylindromatous, has no evidence of mixed tumor, and infiltrates extensively. Whether or not the lymphoid tissue in the parotid tumor represents

invasion or metastasis in a parotid lymph node, I am uncertain.

REFERENCES

1. Ahlbom, H. E.: Mucous and Salivary Gland Tumours, Acta radiol. 1935, Supp. 23, pp 1-452.
2. Hamperl, H.: Uber das Vorkommen von Onkocyten in verschiedenen Organen und ihren Geschwülsten (Mundspeicheldrüsen, Bauchspeicheldrüsen Epithelkörperchen, Hypophyse, Schilddrüse, Eileiter), Arch. f. path. Anat. 298:327, 1936.
3. Houck, J. W.: Tumors of the Salivary Glands, Surgery 6:550 (Oct.) 1939.
4. McFarland, J.: The Histopathologic Prognosis of Salivary Gland Mixed Tumors, Am. J. M. Sc. 203:502 (April) 1942.
5. Mulligan, R. M.: Metastases of Mixed Tumors of the Salivary Glands, Arch. Path. 35:357 (March) 1943.
6. Plaut, J. A.: Adenolymphoma of the Parotid Gland, Ann. Surg. 116:43 (July) 1942.

DISCUSSION OF CASES 3, 4, AND 5

Lt. Col. H. Davenport, Brooke General Hospital: Dr. Stout, what is your feeling about using the criterion of apparent adherence of papillary projections within such a cystadenomatosis as evidence of a malignant change such as found in papillary cystadenocarcinoma of the thyroid?

Dr. A. P. Stout: Let me first say that I do not believe that criteria which may be valid for a tumor of one organ can be used with equal propriety for an apparently similar tumor in another organ. You asked me whether the adherence of papillary projections is a sign of malignancy. You are talking about the papillary cystoadenoma?

Lt. Colonel Davenport: I am referring to Case 3.

Dr. A. P. Stout: I have never used that criterion. Who is its sponsor?

Lt. Colonel Davenport: Well, we use it in differentiating the papillary cystoadenomas of the thyroid from cystadenocarcinomas and I wondered if it were applicable in this case.

Dr. A. P. Stout: Frankly, I do not know. Case 3 is such a rarity that I have only seen one other that resembled it and I do not think 2 cases are sufficient to provide a basis of experience. It represents one of the puzzles which face pathologists from time to time in diagnostic tumor work.

Dr. B. F. Stout, San Antonio: Does papillary cystadenoma lymphomatosum of the parotid become malignant?

Dr. A. P. Stout: I have never known or read of a case which became malignant. Let me repeat that I do not believe Case 3 is a papillary cystadenoma lymphomatosum.

Major M. M. Rice, San Antonio: What is your reaction to the mixed tumors of the bronchus as to malignancy?

Dr. A. P. Stout: Practically the same as with the adenomas of the bronchus. They are much rarer than the adenomas of the bronchus. I have only seen one and I have read about a few others. From this I gather that they behave like the adenomas of the bronchus, which, as you know, start out as insignificant nodules usually in the submucosa and deeper parts of the mucosa and grow through the bronchial wall, pushing the lung aside so that attempts to cure them by means of treatment through a bronchoscope usually fail. I do not know of any mixed tumors of the bronchus which metastasized. Of course, it is reported that some of the adenomas of the bronchus have metastasized to regional lymph nodes. I have never seen it, but I believe the reports.

Lt. F. Alston, Brooke General Hospital: Would you say a few more words in regard to cylindroma, its morphology and pathogenesis.

Dr. A. P. Stout: Very unfortunately the word cylindroma has been handed down to us from the past. I say unfortunately because there are two different tumors to which the term cylindroma has been attached. One is a form of basal cell epithelioma of the skin, the adenoid cystic type; the other is the adenomatous carcinoma of mucous and salivary glands in which a distinctive pattern of gland spaces plugged with mucus is formed. In my opinion the term cylindromatous carcinoma or cylindroma should be reserved exclusively for the truly malignant infiltrating carcinomas such as the tumor in Case 5 and not to mixed tumors which have cylindromatous areas in them such as the tumor in Case 4 shows. This is a rather confusing feature of these tumors making the diagnosis quite difficult sometimes. But I feel that it is a fairly good rule to follow, if you find a tumor which in some areas shows the more characteristic features of a mixed tumor, it can be considered on the basis of probability as a benign tumor which will not metastasize. It may infiltrate and reappear locally, but the chances are strongly against metastasis. Of 392 mixed tumors only 2 metastasized. That is a pretty small percentage.

Lieutenant Alston: Does the term cylindroma then refer to the combination of sheets of epithelial cells associated with small glandular areas?

Dr. A. P. Stout: Yes, unfortunately many who treat cancer of the oral cavity apply the term cylindroma to all oral and salivary cancers of a glandular type. The term should be reserved for the glandular carcinomas of this particular pattern. The cylindromas are somewhat radiosensitive while other glandular carcinomas in this region are not.

Capt. A. Hartman, San Antonio: In Case 3 how do you rule out a thyroid origin?

Dr. A. P. Stout: Well, I ruled it out because some of the cells have a secretion

which reddens with the mucicarmine stain and so far as I know no thyroid cell ever secreted any mucin. That was the decisive point for me in ruling out the thyroid.

Dr. Severance: In Case 4 from your discussion of the mixed tumor, it is very evident that you are using that table of figures—392 of which 2 became malignant—to overcome any prejudice you might have if you see mitotic figures and cells which vary in size and shape. Somebody like me would probably say it is malignant.

Dr. A. P. Stout: Ahlbom and some of the others divide mixed tumors into benign and semimalignant. A tumor must be either malignant or not malignant. I suppose the term semimalignant must mean that the tumor will grow faster, infiltrate, and be much harder to get rid of so that one may anticipate local recurrence. I think that is what it should mean if it is to be used at all.

Dr. Severance: You would probably throw numerous mitotic figures and variation in size and shape of cells in this case out of the window?

Dr. A. P. Stout: Yes, think of the huge number of mitoses in benign rectal adenomas.

Dr. B. F. Stout: You would not expect any of these to metastasize?

Dr. A. P. Stout: Case 5 I consider malignant and I would be quite prepared to learn of metastasis. Case 3 is more or less a mystery and of Case 4 I would say that the chances of metastasis are less than 1 per cent.

THECA CELL TUMOR OF THE OVARY WITH MASCULINIZATION IN A PREGNANT WOMAN

Case 6

History (presented by Lt. Col. H. Davenport, Brooke General Hospital).—A. C. M., a 19 year old housewife, noticed increased libido, enlargement of the clitoris to twice its previous size, and huskiness of her voice during the third month of pregnancy. Two months later she noted growth of hair, first blonde, and later black, over her face. The pubic hair assumed a male distribution and black hair appeared over the medial aspects of the thighs. There was no change in distribution of the body fat. After a premature delivery during the seventh month of pregnancy, the changes persisted except that the black hairs on her face were replaced by acne. The menstrual cycle recurred the month following delivery. At operation an encapsulated ovoid, slightly nodular, mottled pale gray and yellowish-orange tumor was found to have replaced the ovary. On section, the cut surface varied from a moist, myxomatous pale gray tissue to opaque orange-yellow tissue. The masculine features had almost entirely disappeared three weeks after the operation.

Dr. A. P. Stout: *Microscopic Description* (Fig. 6).—A great many sections from different parts of the tumor show a comparable picture which consists of a confused, irregular arrangement of fibroblastic tissues with small scattered groups of foam cells containing lipoid. In some areas the collagen fibers are thick and the tissue quite dense while elsewhere there are myxomatoid areas. There

FIG. 6. (Case 6)—Theca cell tumor of the ovary. A representative field. Lipoid-containing cells are not shown. x 120.

are fairly numerous vascular spaces which do not contain blood cells. No granulosa cells, interstitial cells, sex cords, or rudimentary tubules are recognized.

Comment.—This case is unique so far as my experience and reading go. While pregnancy is in progress, a young woman suddenly develops signs of active masculinization in the third month and has a premature delivery in the seventh month. Following this there is some diminution of the masculinization but most of its signs persist. In spite of this she starts to menstruate one month after delivery and four months after delivery a large left ovarian tumor is removed which has the histological characteristics of a theca cell tumor, that is, one which ordinarily is not supposed to be masculinizing in its effect. Yet following the removal of this tumor the remaining evidences of masculinization rapidly disappear. From the history one would look first for histopathological signs of arrhenoblastoma, but they are lacking. There are no interstitial cells, tubules, or cords of undifferentiated sex cells and one or more of these features have been present in every arrhenoblastoma described. Moreover, there has never been a case of arrhenoblastoma which has caused masculinization during the course of a pregnancy. Traut and Marchetti in 1940 pointed out that the granulosa and theca cell tumors, although they have differing morphological features, prob-

ably have the same cellular origin and hormonal activity and that the majority of such tumors are mixed in composition. Further they recorded active masculinization in 2 tumors of the group although they felt unable to explain this apparent paradoxical effect.

There are a number of tumors described which have been largely masculinizing but which have also produced an excess of estrogens. These have been summarized by Kepler, Dockerty, and Priestly, of the Mayo Clinic, as adrenal-like ovarian tumors associated with Cushing's syndrome (so-called masculinovoblastoma, luteoma, hypernephroma, adrenal cortical carcinoma of the ovary). These tumors are characterized by the formation of recognizable adrenal cortical cells and the masculinizing effect is ascribed to them. Such cases usually display Cushing's syndrome with elevated blood pressure and sometimes sugar in the urine. We do not know whether or not these features were present in the case under consideration.

In this case, then, we are faced with the choice of considering it either: (1) an arrhenoblastoma without any of the histological features of the tumor; (2) a masculinovoblastoma or luteoma without the histological formation of recognizable adrenal cortical epithelium; or (3) a theca cell tumor with paradoxical hormonal effect. Of the three, the last appeals to me as the most logical interpretation. In any event, the occurrence of such a tumor during the course of a pregnancy is unique. It is difficult to say much about malignancy, since the diagnosis is open to question. Of all the above forms, the theca cell tumor has the lowest malignancy rate.

REFERENCES

1. Barzilai, G.: Atlas of Ovarian Tumors, New York, Grune and Stratton, 1943.
2. Kepler, E. J., Dockerty, M. B., and Priestley, J. T.: Adrenal-like Tumor Associated with Cushing's Syndrome (So-called Masculinovoblastoma, Luteoma, Hypernephroma, Adrenal Cortical Carcinoma of the Ovary), Am. J. Obst. & Gynec. 47:43 (Jan.) 1944.
3. Novak, E.: Endocrine Effects of Certain Dysontogenetic Tumors of the Ovary, Endocrinology 30:953 (June) 1942.
4. Traut, H. F., and Marchetti, A. A.: A Consideration of So-called "Granulosa" and "Theca" Cell Tumors of the Ovary, Surg., Gynec. & Obst. 70:632 (March) 1940.

CHORIONEPITHELIOMA OF THE UTERUS DEVELOPING FROM A HYDATIDIFORM MOLE

Case 7

History (presented by Lt. Col. H. Davenport, Brooke General Hospital).—E. C. M., age 28, gravida 1 had been jaundiced for two weeks, and had excessive vaginal bleeding, passing large quantities of grapelike material at home. On admission to the hospital she said that she had been pregnant four months, but her abdomen was the size of a six month pregnancy. She had lost 20 pounds. More mole and placental tissue were passed, but the uterus did not return to normal size. A supervaginal hysterectomy was done. The uterus measured 6 by 9 by 11 cm. On section a plaque of soft fleshy tissue, 1 cm. thick, and 6.5 by 3.0 cm. across the surface, extended into the myometrium at least 6 mm. The ovaries were markedly enlarged and cystic. Metastatic tumor nodules were first noted in chest roentgenograms fourteen months after the operation. One month later, after developing nausea, vomiting, and headaches, the patient suddenly became comatose and expired within an hour.

Dr. A. P. Stout: *Microscopic Description* (Fig. 7).—The seminar section has been prepared from the uterine wall where the mound of tissue projected inward. It shows still recognizable chorionic villi in the myometrium surrounded by proliferated syncytial epithelium of bizarre appearance. This

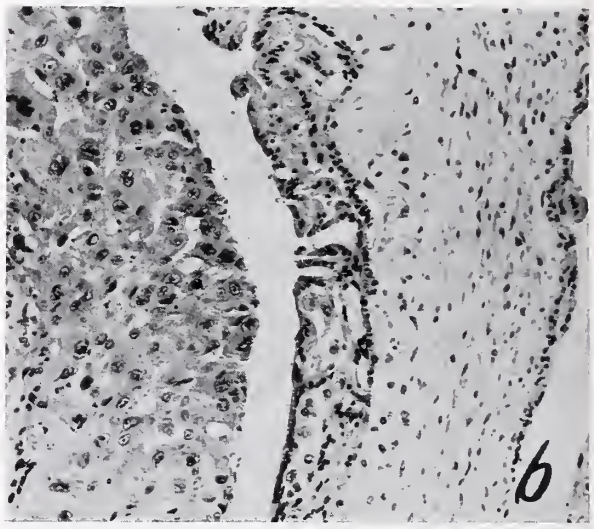

FIG. 7. (Case 7)—Chorionepithelioma of the uterus developing from a hydatidiform mole. A villus is shown at the right with bizarre proliferated trophoblastic cells at the left. x 120.

infiltrates deeply and in some places is found within blood vessels. The tissue projecting into the lumen is composed of necrotic tumor, fibrin, and leukocytes. The chorionic syncytium is found in the veins around the vagina and in metastatic foci in the lung. Almost all of the metastases are obscured by extensive blood clots so that only a few viable cells can be found.

Comment.—This case is noteworthy because it is a proved malignant metastasizing chorionepithelioma which has developed from a preexisting hydatidiform mole. The sections show unmistakable villi still present in the uterus and invasion of the myometrium, uterine, and pericervical veins by trophoblastic cells as well as metastases in the lungs. The statement has been made that about 5 per cent of hydatidiform moles develop chorionepitheliomas. This dictum must be accepted with reserve because of the tendency of some pathologists to call moles with

marked trophoblastic proliferation and infiltration of the myometrium true chorionepitheliomas. Such growths in our experience have not metastasized and have been cured by hysterectomy, so that even if one considers them chorionepitheliomas, they are clinically of a much lower grade of malignancy than the classical chorionepithelioma, which has only trophoblastic cells without villi and almost invariably metastasizes. This present case is of very great interest to me, for it is the first one the slides of which I have personally examined, with remnants of chorionic villi in the uterus and metastases in the lungs. With regard to the treatment of these conditions it is generally agreed that a simple hydatidiform mole does not call for hysterectomy. Some moles are incompletely expelled, requiring subsequent curettage. If such cases show marked trophoblastic proliferation with persisting villi, it has been our practice to advise frequent tests for gonadotropic substance. If this persists or reappears, it is probably wiser to do a hysterectomy at once even though the chances of malignant chorionepithelioma are remote.

REFERENCES

1. Jeffreys, E. M., and Graffagnino, P.: Incidence, Treatment and Prevention of Hydatid Mole and Chorionepithelioma, West. J. Surg. 52:29 (Jan.) 1944.
2. Tenney, B., Jr., and Parker, F., Jr.: Hydatidiform Mole Chorionepithelioma, New England J. Med. 221:598 (Oct. 19) 1939.

DISCUSSION OF CASES 6 AND 7

Major M. M. Rice, San Antonio: Do any of the metastasizing lesions show the outline of chorionic villi?

Dr. A. P. Stout: No, I saw no chorionic villi in the metastases—nothing but trophoblastic cells. Most of the metastases consist of blood clots and there are only a few friable trophoblastic cells.

Major Rice: If you had the uterine section with no further history, what would your diagnosis be?

Dr. A. P. Stout: I would have thought it was an invasive mole in spite of this case, which is very definitely a malignant one. I still would stick to the old idea that it probably was not a malignant metastasizing chorionepithelioma.

Major Rice: Do you base that on the presence of villi and the possibility of Langhans cells in the myometrium?

Dr. A. P. Stout: Mainly on the presence of villi.

Major Rice: Do you take much stock in the absence of Langhans cells?

Dr. A. P. Stout: I think it is very well recognized that the histological diagnosis of malignant chorionepithelioma which is very well differentiated is almost impossible to make because sometimes trophoblasts can appear very bizarre and may be found in veins in the uterine wall and still the case does not behave like a malignant one.

Dr. H. J. Schattenberg, San Antonio: Do you know if there was a Friedman test carried out on the spinal fluid?

Lt. Colonel Davenport: Not on the spinal fluid. We did carry out a series of Friedman tests on urine from time to time. The results started high and dropped almost to zero. They began to rise again in the course of the metastasis.

Dr. Schattenberg: I am wondering what you think of the Friedman test as a prognostic procedure in these cases.

Dr. A. P. Stout: I have had no experience. I cannot answer that.

Dr. Schattenberg: It is being used by some gynecologists to differentiate the malignant type of chorionepithelioma from the benign one. In the highly malignant chorionepithelioma positive Friedman tests occur where otherwise they do not.

Lt. Colonel Davenport: There is an interesting point. A supravaginal hysterectomy was done and what was apparently the residual nodule was found lying adjacent to the cervical stump.

Dr. A. O. Severance, San Antonio: With regard to Case 6, was a fat stain done and was it positive?

Dr. A. P. Stout: Yes, and it was positive.

Dr. Severance: It rules in a theca cell tumor?

Dr. A. P. Stout: It favors such a tumor but the thing against arrhenoblastoma is the absence of interstitial cells, and tubules or cords of undifferentiated sex cells.

Dr. Severance: Would the typical arrhenoblastoma have a positive fat stain?

Dr. A. P. Stout: From personal experience I cannot answer, because I have never seen one. I am still looking for a genuine arrhenoblastoma which fulfills the criteria described.

Lt. Colonel Davenport: I believe Novak would call this Case 6 tumor a poorly differentiated arrhenoblastoma, based on the actively masculinizing effect rather than typical histological features.

Dr. A. P. Stout: I think it would be interesting to get the reaction of other people to this case. I showed it to Dr. B. P. Watson, professor of obstetrics and gynecology at Columbia University, and to Dr. W. E. Studdiford, his associate, who has had a fair amount of experience, and neither of them had ever encountered anything like this case. I tried to run through the literature at my disposal, but could find no record of any

case with this exact sequence of events. It is very astonishing to have a woman suddenly masculinize in the middle of a pregnancy.

Major Rice: In regard to Case 7, would you say a few words about the elusive "syncytioma"?

Dr. A. P. Stout: I would not use the term so as to avoid getting into trouble. I suppose what is meant by it is a nonmalignant proliferation of trophoblasts more invasive than normal. It has been used with syncytial endometritis. I have never been able to learn what it really means. I do not use that term.

Major Rice: A syncytioma tends to behave in a benign manner. I wondered if you use the term at all. What term do you use instead?

Dr. A. P. Stout: No, I do not use it. I doubt very much if the so-called syncytioma is a neoplasm. I think it is simply a vagary of trophoblastic growth.

Dr. H. H. Sweets: Do you know what sex the baby was and how the baby has done?

Lt. Colonel Davenport: It was a seven month stillbirth; the sex of the baby is not known.

Dr. H. H. Sweets, Galveston: Was there an examination of the baby?

Lt. Colonel Davenport: All we do know is that the mother's symptoms persisted for the most part four months after the delivery. Immediately thereafter her voice changed from baritone to soprano, her acne cleared up, and she became normal.

Dr. Sweets: This baby could have had a tumor of some kind.

Lt. Colonel Davenport: As a matter of fact, the case did not come to our attention until after the stillbirth.

Dr. A. P. Stout: I think almost anything is possible in this case, but we had better not do any more speculating about it because we lack all of the facts.

Dr. B. F. Stout: What is the incidence of metastasizing chorionepithelioma in the medical center where you are?

Dr. A. P. Stout: There have been in the Sloane Hospital since its foundation only 1 authentic case of malignant chorionepithelioma. In addition, there has been 1 other case in the Harkness private pavilion. If cases in the literature reported as chorionepithelioma in which chorionic villi are found in the uterus are excluded, uterine chorionepithelioma is truly a rare malignant tumor.

Major M. E. Cox, Camp Robinson, Ark.: Has anyone brought up the question that this might be an exaggerated manifestation of the condition in which we find that pregnant women assume male characteristics—growth of hair on the face, some change in the voice? Is that not correct? This might be an exaggeration of that type.

Dr. A. P. Stout: I think most of the things to which you refer are defeminization and not true masculinizing characteristics. This is my understanding of it, but I cannot claim to be an expert.

Lt. Colonel Davenport: That was one of the reasons she was not studied carefully during her pregnancy. We assumed it was an exaggeration of those features which may occur with pregnancy. However, the symptoms persisted after delivery and a masculinizing tumor was considered.

Dr. A. P. Stout: The persistence of the symptoms after delivery and their disappearance after removal of the ovarian tumor seem to me to be strong arguments that the tumor was responsible for the masculinizing effect.

EMBRYONAL CELL CARCINOMA OF SACRAL REGION

Case 8

History (presented by Drs. J. W. Jackson and A. O. Severance, San Antonio).—E. L. L., age 4, was first found, January, 1944, to have a tumor about the size of a marble just to the left of the rectum. By April, 1945, in this same area there was a large mass which practically encircled the rectum but was definitely located more to the left side; it extended to the labia on the lower border. A firm hard mass was removed incompletely April 11, 1945, by blunt dissection. The blood test for syphillis was negative. There were no roentgenograms made. The tumor at operation was found to involve the area of the sacrum and coccyx, in the retroperitoneal region lateral to the rectum. The blood count was normal. The specimen received by the laboratory consisted of twelve irregularly shaped, varying sized, moderately firm, light to medium brown, somewhat rubbery pieces of tissue. The largest piece measured 8 by 5 by 3 cm. Skin was attached to one piece. Between April 23 and May 11, 1945, the patient was treated with deep roentgen-ray therapy using a .5 mm. copper filter and a 1 mm. aluminum filter. One treatment of 200 r per day was given by rectum to the anterior and posterior lower pelvis over the site of the lesion. At the same time the patient received 300 r every other day for seven days through a different portal along the longitudinal axis of the rectum. The tumor mass proper received a total of 4,348 r.

Dr. A. P. Stout: *Microscopic Description* (Fig. 8).—Sections show that the growth is made up of cords and groups of tumor cells which vary from rounded to elongated and which in most areas are entirely undifferentiated. In places they tend to form gland-like spaces. In one area they have the arrangement and appearance of mole cells. In one section stained with trichrome there are a few of the tumor cells with an acidophilic cytoplasm which tends to be fibrillated and suggests the appearance of a rhabdomyo-

blast. The tumor infiltrates the tissues freely and is found in the striated muscle and surrounding nerves and blood vessels.

Comment.—There are two ways in which this tumor can be explained. It may be assumed either (1) that it arose from congenitally displaced epithelial cells from faulty development in the sacrococcygeal region or (2) that there was a preexisting teratoid growth which had been entirely destroyed by the overgrowth of undifferentiated tumor

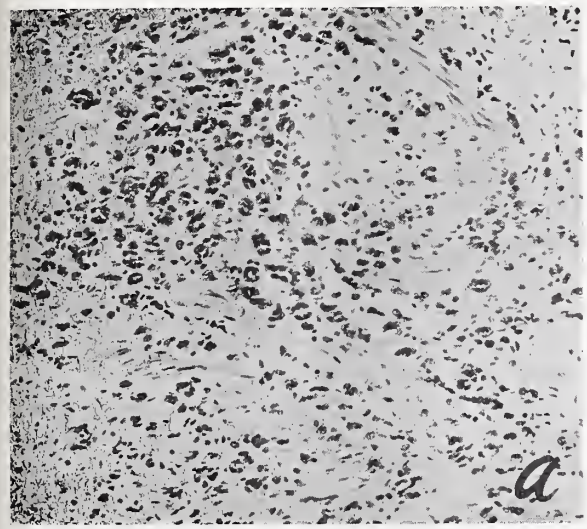

FIG. 8. (Case 8)—Embryonal carcinoma of the sacral region. The small tumor cells here form rosettes as they infiltrate between smooth muscle bundles. x 120.

cells. It is, of course, entirely problematical whether or not such an event can take place. Lisco in 1942 published results of an interesting study of the sacrococcygeal teratomas projecting posteriorly. His cases were both characteristic tumors of differentiated structures in infants and both developed papillary carcinomas which metastasized but did not destroy the original tumor. He believed that one should not speak of tumors as malignant teratomas unless there is good evidence of the presence of the teratoma. This point seems well taken.

If one is not to call the present tumor a malignant teratoma, the only name left for it is embryonal cell carcinoma, since there is no differentiation. The differentiated teratomas are benign and are usually cured by excision. The malignant teratomas and embryonal cell carcinomas all metastasize and are always fatal. In the Laboratory of Surgical Pathology at Columbia University we have records of 2 other cases like this. One, in a 2 year old female infant, was treated by excision and radiotherapy. She died twenty-eight months after admission, of local recurrence, pelvic invasion, and inguinal metastases. The other was in a 9 months old infant and I have no data about the treatment or result. There is also 1 case of differentiated teratoma in an infant which was inoperable because of its very large size and extent.

REFERENCE

1. Lisco, H.: Malignant Tumors Developing in Sacrococcygeal Teratomata, Ann. Surg. 115:378 (March) 1942.

PROBABLE CARCINOMA OF SUPERNUMERARY SUPRARENAL CORTICAL TYPE IN RETROPERITONEAL REGION

Case 9

History (presented by Dr. John M. Moore, San Antonio).—J. T., male, age 12, was admitted to the hospital December 12, 1944. A few days previously while scuffling at school, he received an injury to the left portion of his abdomen. On admittance, his temperature was 103 F., pulse 110, respiration 38. The tentative diagnosis was made of internal injuries, probably kidney. Roentgen study revealed cloudiness in the upper left quadrant with fluid level to the fourth rib posteriorly. Diagnosis of pneumonia was made and penicillin and sulfadiazine were given for several days. January 5, 1945, the patient was dismissed to go home and remain in bed until which time the fluid would be absorbed. On February 3 the child was readmitted with temperature 103 F., pulse 124, respiration 44. Roentgen-ray examination revealed fluid level had returned to the fourth rib. An attempt to aspirate was done with no result; at this time there was a discernible tumor mass in the upper left quadrant and extending below the umbilicus, and a diagnosis of splenic tumor was made. An exploratory laparotomy was done on March 14. A spleen four times normal size was removed and behind the spleen in the retroperitoneal space a tumor mass extending from the diaphragm to the pelvis was noted and a biopsy of this taken The accompanying photomicrograph (Fig. 9) is from this material.

Dr. A. P. Stout: *Microscopic Description* (Fig. 9).—The sections of the spleen show nothing remarkable. The retroperitoneal

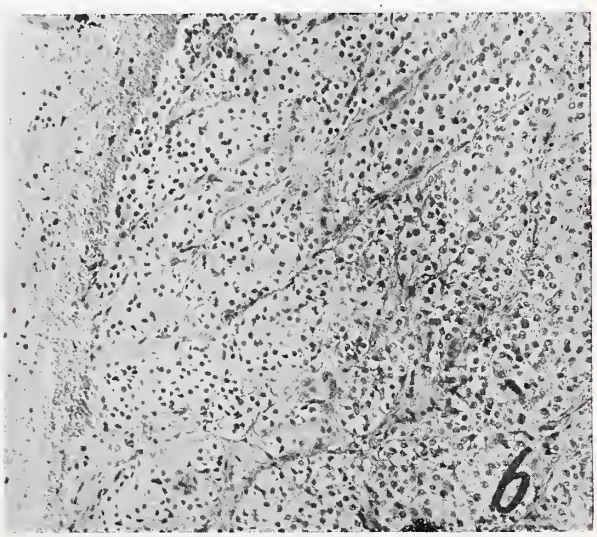

FIG. 9. (Case 9)—Carcinoma of the aberrant suprarenal cortex in the retroperitoneal region. Most of the tumor had the undifferentiated appearance of the cells seen at the right. x 120.

tissue shows what appears to be an epithelial cancerous growth composed of cords of cells separated by strands of connective tissue. In some areas the individual cells are markedly vacuolated so that they have the appearance of the cells of the suprarenal cortex. Elsewhere, this feature is lost and there is some tendency to form tubules, although this may be artefact due to degeneration. Parts of the tumor have widely dilated blood spaces and hemorrhages have taken place.

Comment.—The solid carcinomatous retroperitoneal tumors which cannot be assigned to any definite recognized cellular form always provide a challenge to speculation. Hansmann and Budd, in 1932, after studying a group of cases of their own and reviewing reported cases, came to the conclusion that these tumors can best be explained by assuming that they arise from remnants of the embryonal urogenital apparatus. This seems to be a reasonable viewpoint and it also accounts for the considerable number of tumors with differentiated tissues in them. In this case, the slide which I examined showed in addition to undifferentiated cells, one area in which the cells appeared like those of the suprarenal cortex, and for that reason it seemed proper so to classify it.

REFERENCE

1. Hansmann, G. H., and Budd, J. W.: Massive Unattached Retroperitoneal Tumors; An Explanation of Unattached Retroperitoneal Tumors Based on Remarks of the Embryonic Urogenital Apparatus. J. A. M. A. 98:6 (Jan. 2) 1932.

DISCUSSION OF CASES 8 AND 9

Lt. Col. H. Davenport, Brooke General Hospital: In Case 9, do you think that the areas very similar to the one thrown on the screen are not infrequently seen in embryonal carcinoma of the testis?

Dr. A. P. Stout: I thought that some of the other tumor cells might be, but not particularly those areas with the clear spaces around the nucleus where the cells are arranged in clusters somewhat like the adrenal cortex. Have you ever heard of a primary seminoma in the retroperitoneal region?

Lt. Colonel Davenport: We have one on tap which had a tumor somewhat resembling this one—a definite malignant tumor of embryonal character in the region of the kidney. The urologist found a small nodule in the testis of the same man. Sections fail to show any change so he removed the testis and found an adult teratoma. We thought perhaps both might have originated from embryonal tissue in the region of the kidney, and a portion descended therefore into the testis and a portion remained adjacent to the kidney; one part becoming an adult teratoma and the other part developing into an embryonal carcinoma.

Dr. A. P. Stout: Were both testes not descended?

Lt. Colonel Davenport: Yes, sir. However, I was referring to the early development.

Dr. A. P. Stout: Yes, that leaves the case open to doubt as to an adult teratoma.

Major M. M. Rice, San Antonio: Do you consider that Case 8 might be of neurogenic origin?

Dr. A. P. Stout: No, I do not. You mean some variety of neuroblastoma? No, I do not think it looked like that. Of course, in an infant, one always has to take the neuroblastoma into consideration because it is one of the common tumor forms of infancy. I never saw a neuroblastoma differentiated in this way. In any event, I do not think the rest of the tumor looks like a neuroblastoma. I would expect a neuroblastoma in an infant to show a great many areas of necrosis, for they very commonly become necrotic and give rise to hemorrhages. I do not see any such changes in this tumor.

Major Rice: In Case 9, do you feel this is malignant on account of the microscopic picture or on clinical grounds?

Dr. A. P. Stout: Both. I think you are fairly safe in anticipating a fatal outcome for a large retroperitoneal tumor that cannot be removed. It is malignant in that sense from its position. In this particular case we are dealing with an embryonal cell carcinoma, probably of suprarenal cortical cell origin, which is a malignant tumor wherever it may be found.

Major Rice: Does that include the large tumor described by Hansmann and Budd?

Dr. A. P. Stout: Most of the solid tumors described by them were malignant. They included tumors of suprarenal cortical cells as well as those of sex cells.

Lt. F. Alston, Brooke General Hospital: Are there any indications in your mind for considering endothelioma?

Dr. A. P. Stout: What is your meaning of endothelioma, because maybe you mean something entirely different from what I mean. The only way I use the word is in connection with tumors of the vascular endothelium. I do not use it for meningioma, nor for mesothelioma of the pleura, peritoneum, and pericardium. Dr. Ewing used it for a whole variety of tumors, including Ewing's tumor, which he called an endothelial myeloma. What do you mean?

Lieutenant Alston: The reason I raised the question was that I thought there were some

areas in the section which resembled a synovial sarcoma.

Dr. A. P. Stout: In the first place, it would have to be a metastasis if it were synovial sarcoma because every reported case of synovial sarcoma has occurred in the vicinity of or attached to a joint, tendon sheath, or bursa. I am sure none has been reported in the retroperitoneum. So if you consider that, you would be proposing a new site for a synovial sarcoma or suggesting it was a metastasis. But in any event Case 9 does not have the morphology of a synovial sarcoma.

Lieutenant Alston: I do not know exactly what endothelioma is, but I have thought of it as being under a group of what would be called endotheliomas.

Dr. A. P. Stout: The term "endothelioma" has led to deplorable confusion because of the various, very widely separated tumors and tumor types to which it has been applied. It was even applied to tumors of the parotid at one time. Personally, I am much opposed to its use because of this confusion. I think it is better to restrict the word endothelioma to tumors of vascular endothelium and use other specific names for tumors of other serous membranes.

CARCINOMA OF TEMPORAL REGION METASTATIC FROM THE BREAST

Case 10

History (presented by Dr. B. F. Stout, San Antonio).—One year before coming to the surgeon the patient, a woman, aged 65, noticed three small, hard masses over the temple region beneath the skin. There was gradual growth with no pain, tenderness, or headaches. Roentgen study showed erosion of the bone. Gross description: The specimen consists of three irregularly-sized masses said to be from the region of the temple. They are encapsulated, slightly nodular, and average 3 by 2 by 1.5 cm.

Dr. A. P. Stout: *Microscopic Description* (Fig. 10).—Both sections show portions of a gland-forming tumor which completely fills the tissue removed except for a thin capsule along the edge of one piece. The tumor is obviously a carcinoma which tends to form glands lined by cuboidal or low columnar cells with faintly acidophilic cytoplasm which is sometimes granular. In one area there is a small spicule of bone. No evidence of mucin secretion can be recognized in the hematoxylin and eosin stain section.

Comment.—Since the tumor is said to have grown beneath the skin and to have caused some erosion of the bone, and also since there were three similar nodules, it seems impossible to explain this tumor on the basis of origin from sweat gland epithelium. From its histological appearance, it is not incompatible with sweat gland tumors. Since it cannot be explained as a primary tumor in this site, it must be a metastasis, and the general appearance suggests an origin from the mammary gland, which would account for its resemblance to sweat gland epithelium when it is remembered that the mammary gland is a modified sweat gland.

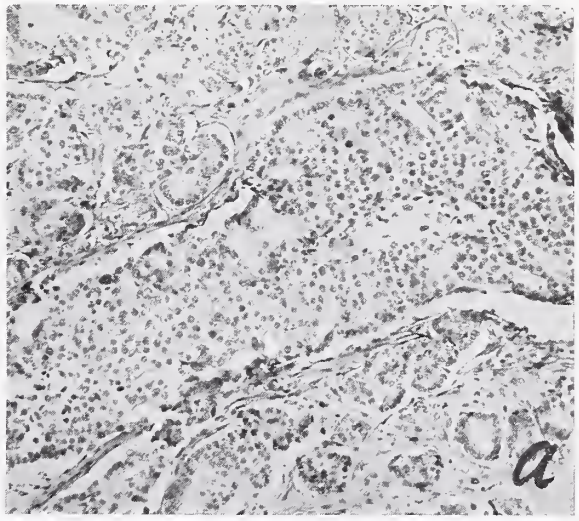

FIG. 10. (Case 10)—Metastasis in the temporal region from a carcinoma of the female mammary gland. The tumor reproduces the appearance of a differentiated breast carcinoma. x 120.

History continued (Dr. B. F. Stout).—After submitting these sections to our local group in which a majority made a diagnosis of primary sweat gland tumor, I wrote a letter to Dr. J. L. Rentfro, of Brownsville, asking for additional history, particularly as to the presence of a primary tumor elsewhere. He stated in reply that this patient had a painless, moveable lump in the breast which had been there several years. This was removed and found to be an encapsulated mass measuring 5 by 7 cm. Sections showed an identical microscopic picture with that seen in the metastatic lesions shown here today.

ADENOID CYSTIC BASAL CELL EPITHELIOMA

Case 11

History (presented by Dr. B. F. Stout, San Antonio).—The patient was a man, age 50. The mass had a duration of two to three years of slow growth. Gross description: The specimen is a pedunculated, sessile growth said to be from the skin of the right loin. It is a rounded, flattened structure, measuring 2 by 2 by 1.5 cm. It has a dense piece of skin in the center, and the edges are rolled.

Dr. A. P. Stout: *Microscopic Description* (Fig. 11).—The tumor in general is made up of masses of rounded, polygonal, and slightly elongated cells which are deeply stained and are outlined by a single layer of tall columnar cells. In places the tumor cells are honeycombed by two different processes. The first is a myxoid degeneration of the fibrous

stroma between the cell cords and the second is an actual degeneration of the tumor cells within the cords producing microcysts. The tumor is connected with the epidermis in a few places by long slender prolongations of the epidermis. In one place there is found connected with the epidermis, but not with the tumor, a number of anastomosing cords

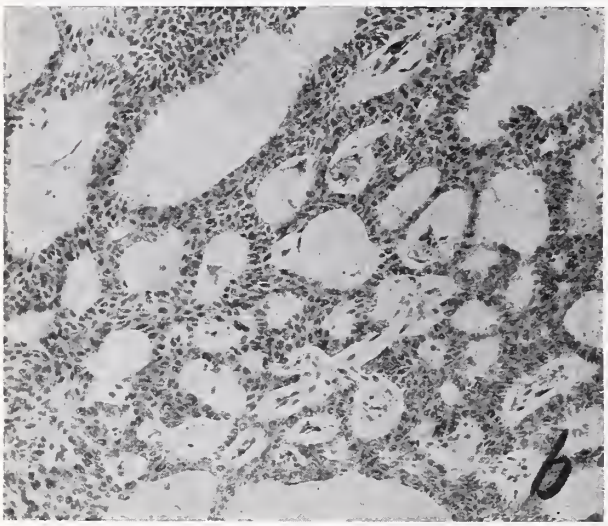

FIG. 11. (Case 11)—Adenoid cystic basal cell epithelioma. The cords of the tumor cells surround spaces which usually contain degenerate fibrous tissue but occasionally are due to tumor cell necrosis. x 120.

of epidermal cells, some of which in places become altered into cells similar to those lining sweat gland ducts.

Comment.—This is a tumor which generically belongs to the basal cell group but which has certain distinguishing features which characterize it. These tumors can be best understood if it is recalled that basal cell epitheliomas are derived not only from the epidermal cells but also from sebaceous and sweat glands and their ducts. In this case the tumor has developed in an area of the skin where a small syringo-cystadenomatous naevus is present and the tumor itself has features suggesting a resemblance of its cells to those of the sweat gland and its ducts. This process has been described by Reuterwall. The basal cell tumors with this aspect all tend to be relatively benign and easily cured by excision. They behave very differently from the rodent ulcer type of basal cell tumor which infiltrates deeply and is so insidious in its extensions that it may be difficult to cure. The great rarity of metastases from basal cell epithelioma is well known. Willis, writing in 1934, accepted only 3 cases of pure basal cell epithelioma with metastases and a few more of basal squamous cell epithelioma. In the Laboratory of Surgical Pathology of Columbia University we have records of metastases from only one pure basal cell epithelioma and one basal-squamous cell tumor.

REFERENCES

1. Reuterwall, O.: Naevus Syringo-Cystadenomatosus Papilliferus and Its Relation to Malignancy, Acta Path. & Microbiol. Scand. (Supp. xvi), 376, 1933.

2. Willis, R. A.: The Spread of Tumours in the Human Body, London, J. & A. Churchill, 1934, p. 127.

DISCUSSION OF CASES 10 AND 11

Capt. A. A. Fink, Camp Swift: In Case 11, would the presence of epithelial pearls change the diagnosis to baso-squamous carcinoma?

Dr. A. P. Stout: No, I think it is fairly common to find some pearl formation in a great many basal cell epitheliomas and the question always arises how many pearls must there be before you begin to call it a baso-squamous cell epithelioma. Frankly, I do not know the answer to that. There is not any definite rule. Formerly I used the term baso-squamous cell epithelioma more frequently than I do now. I tend to use it less and less, and only when I find a tumor has a great many pearls. Of course, the distinction between such a pearl-forming tumor and a true squamous cell epithelioma must be made. I think that the true squamous cell epithelioma never has any basal cell elements in it. If any groups of basal tumor cells are found in a tumor, I always classify it with the basal cell epitheliomas, sometimes as a baso-squamous. We do not consider the baso-squamous cell epithelioma more malignant than the pure basal cell epithelioma.

Dr. B. F. Stout: What criteria do you use in determining from which of the skin appendages these tumors arise?

Dr. A. P. Stout: Well, if a tumor is not attached to the epidermis any place, I assume that it probably comes from basal cells of the skin appendages. I think that the adenoid cystic type of basal cell epithelioma comes from the epithelium of sweat glands and their ducts.

Dr. B. F. Stout: What is the possibility of a tumor of this type arising from hair follicles?

Dr. A. P. Stout: I do not know, but I think it is small. I suppose you would like to bring up the question of trichoepithelioma—that is another term which unfortunately means very different things to different people. For instance, Shields Warren, of Boston, uses it quite frequently while I have only seen perhaps 2 or at most 3 cases that I would recognize as trichoepithelioma. What I mean by it is a variety of basal or squamous cell epithelioma which tends to form caricatures of hair follicles. But I think other people

apply the term trichoepithelioma to any kind of a tumor which supposedly arises from the epithelium of hair follicles. I have had discussions on this subject with Warren and we have not arrived at any mutual ground yet.

Lt. Col. H. Davenport, Brooke General Hospital: Does this tumor not have some of the features of the mixed tumor of the sweat gland?

Dr. A. P. Stout: For me it does not, because the term mixed tumor in my estimation should be reserved for tumors which closely resemble the mixed tumors of the mucous and salivary glands and have the characteristics of those tumors, which this tumor lacks. I am sure that it is possible for tumors resembling the tumors of mucous and salivary glands to occur in various parts of the body, but I think it is a rare event. Dr. L. C. Simard,* of Montreal, some years ago reported a very good one in the hand which had all the features of a mixed tumor of the salivary glands.

Lt. Colonel Davenport: Do you think that you have to be able to identify the basket cells or myoepithelial cells in order to make that diagnosis?

Dr. A. P. Stout: No, I do not have to. That is another term that is confusing. Myoepithelium is found in apocrine sweat glands and the mammary glands. The myoepithelial cell has a smooth muscle tail which passes from the cell cytoplasm out into the surrounding stroma. It is perfectly possible to see these tails with hematoxylin and eosin stain, but it is very much easier to see them with the trichrome stain because the blue of the connective tissue is sharply contrasted with the red tail. When hematoxylin and eosin is used it is necessary to depend upon different intensities of red. The cells of a papillary cystoadenoma in the breast sometimes have myoepithelial tails very strikingly developed.

RECURRING PIGMENTED MOLE OF FOREARM

Case 12A

History (presented by Drs. H. Hartman and H. J. Schattenberg, San Antonio).—J. P., middle aged, had a tumor growth of the left forearm, which presented a dark bluish appearance on the surface. This elevated area measured approximately 5 mm. across. Gross section revealed extension of the growth downward for a distance of approximately 2 mm. No gross evidence of encapsulation was seen. A further history of the case is that a growth of similar gross appearance was treated by cauterization about five months previous, and that the present growth was a recurrence.

*Simard, L. C.: Tumour of the Palm Having the Structure of a Mixed Tumour of the Salivary Glands, Am. J. Cancer 33:182 (June) 1938.

PIGMENTED MOLE OF HAND

Case 12B

History (presented by Lt. Col. H. Davenport, Brooke General Hospital).—This patient has a small tumor on the left hand, which began five years ago. It was removed with cautery in 1941. A few months later it was struck with a baseball and has been gradually increasing in size since then.

Dr. A. P. Stout: *Microscopic Description* (Fig. 12).—Both sections show an elevated, thinned epidermis which covers a rounded nodule composed of cords of mole cells separated by fibrous bands. Some of the mole cells are pigmented and some are multinucleated, but none of them shows definite evidence of malignant change. Near the epidermal surface in slide 12A there is a good deal of heavily pigmented fibrous tissue which may represent the scar of the preceding operation. The mole cells infiltrate the structures of the corium but in general the outlines of the mass are quite circumscribed. Phagocyted pigment is found at some little distance outside of the main mass.

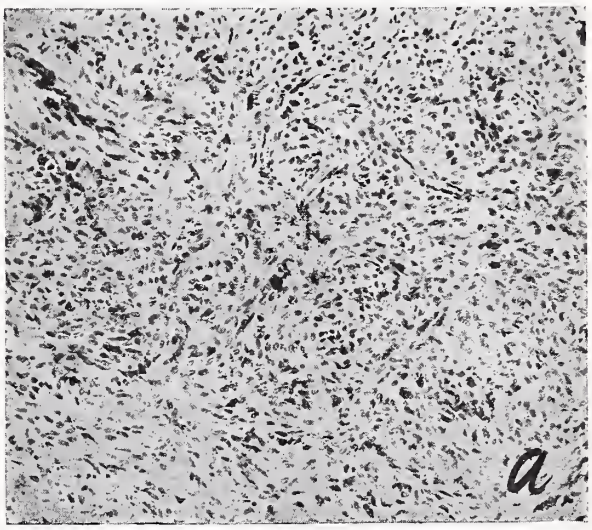

FIG. 12. (Case 12A)—Recurrent pigmented mole of the forearm. Cords of the mole cells are separated by slender bands of fibrous tissue. Fine granules of pigment are shown in some of the cells. x 120.

Comment.—Case 12A has a number of interesting features. In the first place it illustrates the danger of incomplete removal of a mole since the tumor has recurred in situ. Fortunately for the host, the persisting tumor remains benign, but all of you must have encountered cases, as I have, in which incomplete removal of a pigmented mole has resulted in the development of a malignant melanoma. The question of the origin of the ordinary mole cell still remains for me unsolved. It is certain that a considerable number of moles have nervous elements in their

deeper portions, including tactile corpuscles, and I have observed a neurofibroma in the skin of an infant in which cords of mole cells were formed; but to conclude that all mole cells are neurectodermal derivatives still seems to me open to debate, although I am quite willing to believe that the proponents of the hypothesis may be correct. The clinical description of the present lesion states that it appeared blue. In my opinion this can be explained by the fact that much of the pigmented tissue lies well below the surface and it was therefore seen through a film of nonpigmented tissue. This is also true of the blue nevus which histologically looks quite different from the present tumor. It is made up of interlacing strands of fibrous tissue associated with which are very long ribbon-like melanoblasts containing melanin granules. In no part of the true blue nevus are there any rounded mole cells and there is always a zone of nonpigmented corium between it and the epidermis. Unless a tumor fulfills all of these requirements it should not be called a blue nevus.

It is an interesting fact as emphasized by Montgomery and Kahler that no metastasizing tumors have ever developed from blue nevi. Increase in size and local infiltrative growth with a microscopic appearance resembling a fibrosarcoma with pigmented ribbon cells is the limit of known malignant change. It may not be inappropriate here to remark that the other pigmented skin tumors, such as the pigmented epidermoid mole, pigmented senile keratosis, and pigmented basal cell epithelioma, are all relatively innocuous. Only the true pigmented moles are potentially dangerous and only the malignant melanomas actually threaten life.

REFERENCES

1. Montgomery, H., and Kahler, J. E.: The Blue Nevus (Jadassohn-Tièche): Its Distinction from Ordinary Moles and Malignant Melanomas, Am. J. Cancer 36:527 (Aug.) 1939.
2. Montgomery, H., and Kernohan, J. W.: Pigmented Nevi with Special Studies Regarding a Possible Neuro-Epithelial Origin of the Nevus Cell, J. Invest. Dermat. 3:465 (Dec.) 1940.
3. Webster, J. P., Stevenson, T. W., and Stout, A. P.: The Surgical Treatment of Malignant Melanomas of the Skin, S. Clin. North America, 24:319 (April) 1944.

GRANULAR CELL MYOBLASTOMA OF LUMBAR REGION

Case 13

History (presented by Dr. A. P. Stout).—A small, 1 cm., firm, colorless, slightly elevated nodule was present in the skin of the lumbar region. It was excised with surrounding tissue under the impression that it was a sebaceous cyst.

Dr. A. P. Stout: *Microscopic Description* (Fig. 13).—Sections show that the tumor is made up of masses of rounded cells with small nuclei and large cell bodies filled with tiny acidophilic granules. These cell masses are separated by strands of fibrous tissue. They extend from the papillary layer of the skin downward to the subcutaneous fat, which is barely entered. The tumor shows the same morphology everywhere. An interesting phenomenon which is sometimes seen in connection with these tumors, when they impinge upon the epidermis or mucous membrane, is the proliferation of the epidermis so that elongated rete pegs extend well downward beneath the subpapillary layer and sometimes form pearls with central keratinization, separate from the rete pegs. This gives a histological picture superficially resembling an epithelioma.

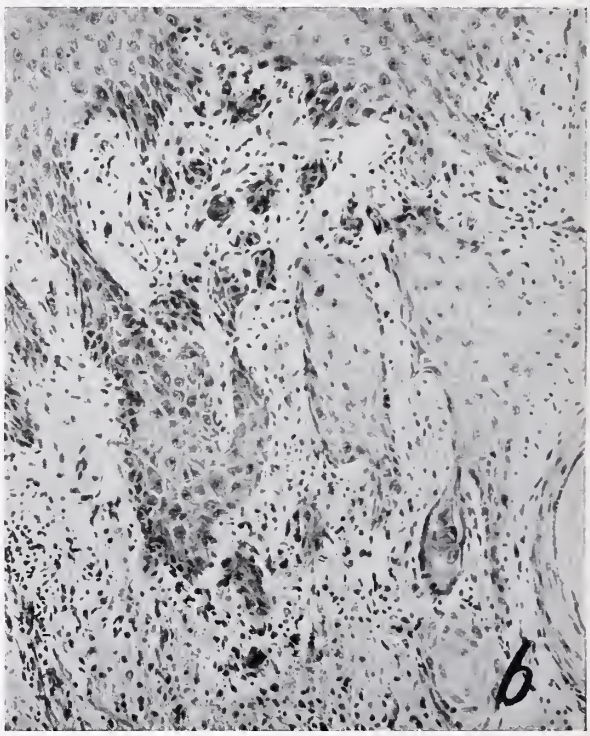

FIG. 13. (Case 13)—Granular cell myoblastoma of the lumbar region. The photomicrograph shows the epithelioma-like downward growth of the epidermis with the granular cell myoblasts massed at the bottom of the picture and small inconspicuous groups of them between the elongated rete pegs. x 120.

Comment.—There are a number of interesting features about this case. There seems to be considerable evidence in favor of the belief that these are myogenous tumors, but, if so, it seems peculiar that they should develop in situations where striated muscle is not normally found, such as the vocal cord, the external auditory canal, the gums, skin, uterus, bladder, stomach, esophagus, and mammary gland. One can only suggest that it must represent a development from undifferentiated mesenchymal cells of an abortive form of striated muscle cell since such granular cells normally do not exist. The great majority of these tumors are quite benign

and harmless. However, there does exist a malignant variety which can metastasize and kill. The Ravichs and I reported such a case which developed in the bladder, and subsequently 2 other metastasizing cases have been brought to my attention, 1 in the gluteal region with metastases to the lung, which will be reported by Dr. L. V. Ackerman, of the Ellis Fischel State Cancer Hospital in Columbia, Mo., and the other in the leg with metastases in the lung, to be reported by Dr. William B. Dublin, of Los Angeles, Calif. The only feature which distinguishes the malignant myoblast from the benign is the size of the nucleus, which is larger with a larger nucleolus. But even this feature may be lacking in the primary tumor and appear only in the metastases so that there are no reliable characteristics which are always present in the primary growth.

A certain amount of confusion exists because these tumors are sometimes called simply myoblastomas or myoblastic myomas, which is the name given them by Abrikossoff, who first described them. Unfortunately, the name myoblastoma is also used by Howe and Warren for certain malignant undifferentiated muscle tumors and this led them to suggest that all myoblastomas, including the granular cell tumors, are much more often malignant than is supposed. In my experience only 6 per cent of the granular cell myoblastomas have proved malignant. Finally, this tumor shows one other feature which was stressed by Klemperer but is still not universally appreciated. When these tumors involve the skin or mucosa and fill the papillae, they sometimes stimulate downward proliferation of the epithelial cells with pearl formation, which can imitate the appearance of a squamous cell epithelioma. This type tumor is not a true neoplasm and is entirely harmless but it may be very serious for the patient if called epithelioma by a pathologist. In 1 case in the tongue which came to my attention, because of the epithelial proliferation, the granular cell myoblastoma was treated with radium needles, producing extensive radionecrosis which necessitated partial resection of the tongue. The cause of this proliferation is unknown.

REFERENCES

1. Horn, R. C., Jr., and Stout, A. P.: Granular Cell Myoblastoma, Surg., Gynec. & Obst. 76:315 (March) 1943.
2. Klemperer, P.; Myoblastoma of the Striated Muscle, Am. J. Cancer 20:324 (Feb.) 1934.
3. Ravich, A., Stout, A. P., and Ravich, R. A.: Malignant Granular Cell Myoblastoma Involving the Urinary Bladder, Ann. Surg. 121:361 (March) 1945.

DISCUSSION OF CASES 12A, 12B, AND 13

Capt. A. Hartman, San Antonio: What do you take as the principal difference between the benign and malignant melanoma?

Dr. A. P. Stout: It may be very difficult to distinguish between the two. The question arises only in the small tumors which are limited usually to the skin, because if a tumor infiltrates into the subcutaneous tissue and its cells show mitoses and are obviously cancer cells, it must be malignant because the benign mole does not extend to subcutaneous tissues. You are talking, I take it, about those difficult skin tumors where you are uncertain whether you are dealing with a malignant melanoma or not. I depend on several things to help me. If the cells infiltrate into the epidermis and grow through it, I think that is a sign of malignancy. And if the cells appear different from any known mole cell—it is hard for me to put it in any other words—if they have the appearance of cancer cells or show mitoses. I think one can perhaps gain the most information from study of the nuclei and nucleoli of those cells. I depend very greatly on that individual cellular difference. I have a fairly clear mental picture of a benign mole cell whether it is rounded or spindle shaped, and if the cell of the mole differs from standard along the lines of having a hyperchromic nucleus and invasion of the epidermis, I feel confident that it should be called a malignant melanoma.

I should like to mention in connection with malignant melanomas, three forms of malignant melanoma which are much less malignant than the average. I think it is worth knowing about. In the first place, there are the malignant melanomas of children below the age of puberty. They hardly ever behave like malignant tumors. At the Memorial Hospital in New York Dr. F. W. Stewart told me they know of only 1 that metastasized and I have known of only 2. All the rest have behaved like simple moles although histologically and through rapid growth and heavy pigmentation they simulated malignant tumors. Then there is the form that is known as the malignant freckle. That is the type of malignant melanoma that is akin to the intraepidermal squamous cell epithelioma and the multicentric basal cell epithelioma. It extends centrifugally in the skin and does not penetrate deeply and it may never metastasize so that the prognosis in that form is much better than for the ordinary malignant melanoma. The third form is the subungual malignant melanoma. As a group these are less regularly fatal than the malignant melanomas of other parts of the body.

Dr. D. Jackson, San Antonio: How about the melanoma of the eye?

Dr. A. P. Stout: I am not including that tumor with the malignant melanomas of the skin. That is a separate tumor and I think

requires entirely different discussion. It is not nearly as malignant, of course, as the malignant melanoma of the skin. A great many of these are cured if the eye is removed before the tumor has passed through the tunics or along the optic nerve.

Lt. Colonel Davenport: Do you make a point of differentiating between the dermo-epidermal or junction nevus from the intradermal type of nevus?

Dr. A. P. Stout: Yes, I do. I think they are entirely different tumors. The intradermal type of nevus I think of as an epidermoid type of mole. It is not made up of ordinary mole cells but definite epidermal cells. In my opinion it is relatively a harmless lesion which is often very difficult to distinguish from the pigmented senile keratosis. You may need the history to help you out. If the lesion has been present since birth or childhood, it is an epidermoid mole, while if it developed in the later years of life, it is usually called a senile keratosis.

Dr. J. L. Goforth, Dallas: Is there any known reason why the pigmented cell responds so poorly to irradiation?

Dr. A. P. Stout: Of course, melanin absorbs the rays and I think that is one reason why the dark-skinned races get relatively few malignant skin tumors of any type and why they are relatively immune to the harmful effects of sunlight. I do not think they have the type of skin that the fair complexioned white person has that is so prone to get all kinds of skin tumors.

Lt. Colonel Davenport: What is the relative occurrence of metastasis by blood stream from the primary site and by the lymphatics in malignant melanoma?

Dr. A. P. Stout: I think it is the metastasis by the blood stream that generally defeats one in the treatment of malignant melanoma, and I feel that it must occur very frequently and relatively early, often before the diagnosis is made, although the metastasis when it reaches its new site may remain quiescent before it begins to grow. Metastasis takes place very early through both the blood and lymphatic systems. There is extremely little chance of cure in a case in which metastases are present clinically in the regional lymph nodes. I have never encountered one in which metastases clinically were present that was cured.

Lt. Colonel Davenport: Frequently the question comes up as to whether or not block dissection of lymph nodes is worth while.

Dr. A. P. Stout: Personally, my feeling about that is that I would remove the regional nodes before they showed any clinical evidence of metastasis. I have seen such cases cured but I have seen no cures when there were palpable metastatic nodes.

Lt. Colonel Davenport: Do you use the term neuro-nevus?

Dr. A. P. Stout: I do not. But I would be willing to—only not in a sense that it is generally used I think. I am not absolutely sure what is meant by neuro-nevus. Those who believe the pigmented mole is a derivative of the neuroectoderm would use it for all except epidermoid moles, in which case it would be a synonymous term. Others restrict its use to those moles in which neuroid structures are present, such as Meissner corpuscles.

Dr. Paul Brindley, Galveston: Would there be any difference in the microscopic picture of a smooth muscle and striated muscle blastoma?

Dr. A. P. Stout: I have studied a great many of the granular cell myoblastomas trying to find either longitudinal fibers or cross striations. I have never found longitudinal intracellular myofibrils, and while I have seen an alignment of granules which suggested cross-striations I have never seen really satisfactory differentiated cross-striations.

Lt. R. C. Lewis, Brooke General Hospital: It is said that the junctional or dermo-epidermal nevus is the type that usually develops into a malignant melanoma. Do you concur?

Dr. A. P. Stout: I imagine when you use that term you mean the ordinary type of pigmented mole. That term is used to distinguish it from the epidermoid mole. I will answer yes. That is the type which can develop malignant changes.

Lt. Colonel Davenport: According to one of the classifications which you use, nevi are divided into intraepidermal, dermo-epidermal, or junctional and intradermal. In the last type there is apparently an absence of the junctional feature. It is said that they rarely become malignant.

Dr. A. P. Stout: I do not agree. Moles whose cells lie altogether in the corium can become malignant and the malignant transformation may start well below the surface.

LEIOMYOSARCOMA (?) OF THE LIVER WITH METASTASES TO LUNG AND PERITONEUM

Case 14

History (presented by Dr. John M. Moore, San Antonio).—Mr. N. B., age 60, a linotype operator, had first noted loss of appetite and weakness about two months previously. This had steadily grown worse and about two weeks previously he first noted some distention of his abdomen. However, he said he had no pain at any time. He stated that

he had drunk about six bottles of beer daily for the past thirty years. The clinical diagnosis was biliary cirrhosis of the liver. The blood count showed erythrocytes 3,680,000, leukocytes 27,000, neutrophils 85 per cent, nonprotein nitrogen 49 mg. per 100 cc., icterus index 42. On August 17, 1945, an autopsy was done. The abdomen was found distended with a large amount of yellowish fluid, and a large nodular liver weighing 3,600 Gm. There were metastatic nodules in the lungs, mesentery, and peritoneum.

Dr. A. P. Stout: *Microscopic Description* (Fig. 14).—Sections show a tumor made up of bundles of spindle shaped cells containing elongated cigar shaped nuclei often with rounded ends. The cells are accompanied by connective tissue fibers. No intracellular fibers are observed in the cytoplasm of the

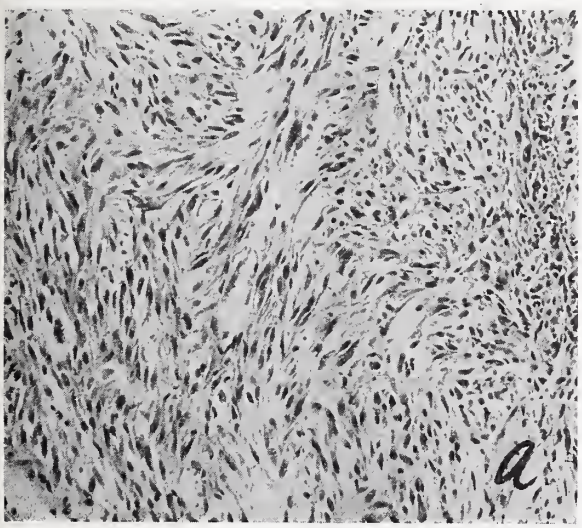

FIG. 14. (Case 14)—Leiomyosarcoma of the liver. x 120.

slender tumor cells. It has infiltrated the liver extensively, undergone patchy necrosis, and metastasized to the lungs, omentum, and peritoneum.

Comment.—If this is a primary liver tumor it can be roughly classified as a spindle cell sarcoma. This is undoubtedly a rare form of primary malignant tumor of the liver, for Herxheimer, writing in Henke and Lubarsch's Handbuch in 1930, mentioned only five recorded examples. He did not attempt to indicate the cellular origin of these tumors, a fact which is abhorrent to the modern oncologist. The morphological appearance of the cells of the present tumor suggests to me an origin from smooth muscle. It is not at all uncommon not to be able to find myofibrils in leiomyosarcoma so that this failure does not necessarily invalidate the diagnosis. Nor does the fact that there are many connective tissue fibers present in the tumor in some areas since almost any kind of a mesenchymal cellular derivative can form collagen. I have not made an exhaustive search but there is very little reference to primary smooth muscle tumors of the liver. Herxheimer mentioned only metastatic leiomyosarcomas. Demel in 1926 recorded the removal of a leiomyoma two months before publication and stated that at the operation no primary focus was found. In the same year Smith described the case of a 50 year old woman who had multiple leiomyosarcomatous nodules in the liver and intestine and assumed that the intestine was the primary site.

There are, of course, many other records of frank metastases in the liver of leiomyosarcoma but I do not find any unquestioned primary smooth muscle tumor other than the case of Demel. In the Laboratory of Surgical Pathology at Columbia University we have records of one rather well differentiated leiomyosarcoma of the liver with well developed myofibrils in a 64 year old male. It replaced most of the left lobe and weighed about a kilogram. No other primary site was discovered at operation when the left lobe and tumor were resected. Resection was incomplete and thirteen months later a recurrence in the liver was biopsied. It is probable that the present tumor is primary in the liver but without an autopsy one cannot be certain of it.

REFERENCES

1. Demel, R.: Ein operiertes Fall von Leber-myom, Arch. f. path. Anat. 261:881, 1926.
2. Herxheimer, G., in Henke and Lubarsch's Handbuch der Speziellen Pathologischen Anatomie und Histologie, Berlin, J. Springer, 1930, vol. V/1, p. 916 ff.
3. Smith, L. W.: Four Unusual Malignant Tumors of the Liver, Arch. Path. & Lab. Med. 1:365 (March) 1926.

LEIOMYOSARCOMA OF RETROPERITONEAL TISSUES

Case 15

History (presented by Lt. Col. Paul G. F. Schmitt and Lt. Col. H. Davenport, Brooke General Hospital).—N. F. S., a white man aged 45 years, about July, 1943, became aware that his lower abdomen was enlarged. It was noticed during military training when he threw himself on the ground and when he had to wear a tight belt. The only symptoms were epigastric distress following intake of certain foods, at which time he had discomfort in both lower quadrants. On admission in March, 1944, he stated the mass in the lower abdomen had increased in size rather rapidly during the prior six months. The physical and x-ray examinations revealed a mass suggestive of a uterus of 6 months pregnancy. At operation, an ovoid tumor measuring 25 by 15 cm. was found. Its surface was covered with congested vessels. It was dark brownish-red with areas of grayish-yellow. The omentum was adherent to it at the right superior pole, and two loops of small intestine were adherent to the left superior aspect of it. A portion of the sigmoid colon was attached to one side. On dissection of the intestine away from the tumor, the intestine was so densely adherent that it was necessary to include the muscle layer in many places. The main blood supply and point of attachment was at the lowermost part of the tumor. It was also attached to the posterior

superior wall of the bladder. A large artery could be palpated entering the mass through this attachment coming from the left side. On the left side there was a fold of tissue covered with peritoneum which simulated the left round ligament. It was attached to the tumor, forming part of the pedicle. The attached portion of the tumor was entirely surrounded by peritoneum. Further dissection showed that the tumor was either connected to or invaded the dome of the bladder. A large segment of the bladder wall was resected in this region. During the operation the tumor was partially opened and considerable brownish-bloody fluid escaped. The origin of the tumor could not be definitely established at operation. The attachments of the omentum and intestines were unquestionably secondary. The main blood supply apparently entered the tumor from the left side in the position of a left ovarian or superior vesical artery. The surgeon was unable to determine whether the bladder had been invaded secondarily or whether the tumor may have arisen from the bladder. The patient progressed fairly well until December, 1944, at which time he began to have symptoms of partial intestinal obstruction. At operation on February 24, 1945, extensive peritoneal metastases were found.

Dr. A. P. Stout: *Microscopic Description* (Fig. 15).—Sections of the original tumor show that it is made up of elongated spindle-shaped cells arranged in twisted cords which have some tendency to interlace. The nuclei are sharply defined but do not have large nucleoli and mitoses are rare. There is an

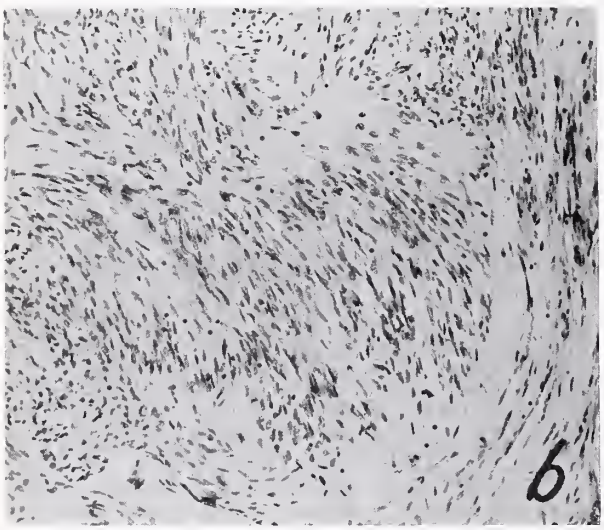

FIG. 15. (Case 15)—Leiomyosarcoma of the retroperitoneal tissue. The interlaced bundles of spindle shaped cells show some tendency to nuclear alignment and areas of degeneration. x 120.

ill-defined suggestion of nuclear alignment in palisade formation. There are often rather vague longitudinally disposed intracellular acidophilic fibrils which are suggestive but not absolutely characteristic of myofibrils. There are also many delicate intercellular connective tissue fibers. Between the bundles the connective tissue shows a tendency to degenerate and the central part of the tumor is necrotic. The recurrent nodules show the same general features but with a somewhat less well defined arrangement.

Comment.—The diagnosis here in my opinion lies between a Schwann cell and a smooth muscle tumor, since these are the only two which consistently exhibit the features above described. The longitudinally arranged intracellular acidophilic fibers are very strongly in favor of a smooth muscle origin, since Schwann cells do not have intracellular fibrils of this variety.

It is not an uncommon mistake to confuse these two tumors and it is most frequently made with respect to the gastro-intestinal tract. French authors are largely responsible for this error but it has been copied in this country as I have had occasion to point out before. It seems more probable that the present tumor developed from the retroperitoneal tissues and only secondarily became adherent to the omentum, intestines, and urinary bladder. Rather characteristically it has grown to a large size while still maintaining some degree of differentiation. Occasionally these tumors are as well differentiated as simple leiomyomas and yet metastasize and kill. So far as our experience with 8 retroperitoneal leiomyosarcomas goes, the tumor is never cured, probably because its situation prevents radical and complete removal. It can, however, remain inactive for a long period of years—1 of our patients had the tumor persisting for seven and a half years. The tumor is radioresistant, so that surgical removal is the only method of treatment that can be used.

REFERENCES

1. Forum: Abdominal Neoplasms of Neurogenic Origin: H. K. Ransom, M. D., and E. B. Kay, M. D.; Diagnosis and Surgical Management of Leiomyomata and Leiomosarcomata of the Stomach: Frank H. Lahey, M. D., and Bentley P. Colcock, M. D. (Ann. Surg. 112:700-746 and 671-686, respectively, Oct. 1940); Ann. Surg. 114:1117, 1941.
2. Golden, T., and Stout, A. P.: Smooth Muscle Tumors of the Gastrointestinal Tract and Retroperitoneal Tissues, Surg., Gynec. & Obst. 73:784 (Dec.) 1941.

DISCUSSION OF CASES 14 AND 15

Major M. M. Rice, San Antonio: What would be the criterion of diagnosis of malignancy in Case 15?

Dr. A. P. Stout: I would say large size, some evidence of infiltrative growth, and the failure to be completely differentiated. A pure leiomyoma would show very definite myofibrils and I doubt if there would be quite as distinct palisading of the nuclei. The situation makes it practically a hopeless tumor anyway.

Lt. Colonel Davenport: How often do you encounter a malignant neurilemoma?

Dr. A. P. Stout: Very seldom where it can be proved that it is one. That is a question that I have been investigating for a good

many years, trying to get definite information by the aid of tissue culture. Unfortunately malignant neurilemoma comes along so seldom that it is a very slow business collecting data. Dr. Margaret R. Murray in our laboratory has had an opportunity of studying only 4 cases of malignant Schwann cell tumor. I would exclude this case as a malignant Schwann cell tumor chiefly because of the presence of those intracellular fibrils, even though they cannot be recognized as myofibrils. I do not think any kind of Schwann cell ever has intracellular fibrils.

Audience Member: Would a differential stain be any good?

Dr. A. P. Stout: I used the Masson-trichrome stain in both the liver and retroperitoneal tumors and could not find definite myofibrils in either one. That influenced me somewhat, but, as I have already said, I do not think that the absence of intracellular fibrils necessarily excludes the possibility of a leiomyosarcoma because in leiomyosarcoma of the uterus it is not possible to demonstrate intracellular myofibrils in a majority of cases. The tumors are too undifferentiated for it.

INTRADUCTAL CARCINOMA OF THE BREAST

Case 16

History (presented by Dr. A. O. Severance, San Antonio).—Mrs. J. A. M., age 53, had had a tumor removed from the left breast twenty-six years previously. The pathological examination had been negative. The operative site had always been hard and tender, worst at menstrual periods. Five weeks previously she had noticed a nodule in the same area. Recently a finger-like projection had developed in this nodule. Eleven years earlier the patient had taken thyro-ovarian pills for one year. Physical examination showed a scar in the left breast with hard nodules along the scar. A plateau test was uncertain. No tumor cells appeared in either nipple secretion. The laboratory data were not important. May 3, 1945, excision of the tumor area only was performed. Two pieces measured 7 by 6.5 by 5.5 cm. and 6 by 5 by 2.5 cm. Numerous small cysts and tumor-filled ducts or cysts were seen. June 13, 1945, examination of the breast was negative.

Dr. A. P. Stout: *Microscopic Description* (Fig. 16).—The section shows a segment of hyperplastic mammary gland tissue showing a number of different changes. There are a considerable number of ducts which are widely dilated, and some of them are partly filled by an epithelium which has formed multiple spaces within the lumens, lined by small, deeply stained cells which have projecting snouts on their luminal surfaces. This is a characteristic of apocrine sweat gland cells and suggests the sweat gland origin of mammary duct epithelium. In a number of the dilated ducts the lining cells have a quite different appearance. They are much larger, paler, the nuclei are clearly defined, and the chromatin network distinct, and sometimes there are formed rosettes or gland-like spaces among these cells. These groups of cells distend the lumen without any

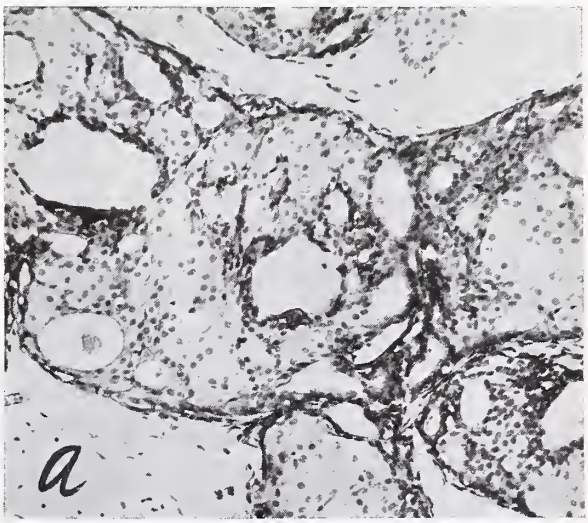

FIG. 16. (Case 16)—Intraductal carcinoma of the female mammary gland. Large pale cancer cells distend the ducts, form rosettes, and displace the noncancerous lining cells. x 120.

fibrous framework to support them. In some dilated ducts, both types of cellular growth are found. There are very few acini in the section, and although these show some degree of proliferation, it is not in the disorderly fashion characterizing the process known as adenosis.

Comment.—In my opinion this is an example of marked chronic cystic disease with intraductal hyperplasia, which has resulted in cancer formation of the intraductal type. The large pale cells with hyperchromatic nuclei, growing in an unsupported fashion within the duct lumen, represent cancer cells. They are quite different from any normal or hyperplastic mammary duct cells and their individual characteristics and method of growth stamp them as cancer cells. It is the intraductal type of cancer, and so far as this section is concerned, it has not invaded the tissues outside the ducts. Nevertheless, in our opinion, such cases should always be treated as carcinoma and a radical mastectomy carried out. The prognosis for this group of tumors is better than for the average breast carcinoma.

INTRADUCTAL CARCINOMA OF THE BREAST

Case 17

History (presented by Dr. H. J. Schattenberg, San Antonio).—A white woman, age 35, had noted a

nodule in the upper outer quadrant of the right breast for the last six months. She believed that the tumor had decreased in size. A simple mastectomy was performed. Within the breast, a fairly firm neoplasm 2 by 3.5 cm. was noted. Within this mass was seen a firmer area 1 cm. in diameter which was quite firm and cut with increased resistance. This tissue had a light pink appearance on gross section.

Dr. A. P. Stout: *Microscopic Description* (Fig. 17).—The sections show a number of fragments of breast tissue. Most of these have a considerable number of dilated ducts which are more or less completely filled by large irregularly rounded tumor cells showing frequent mitoses and having the definite aspect of cancer cells. They often form

FIG. 17. (Case 17)—Intraductal carcinoma of the female mammary gland. Unsupported by any fibrous framework, the cancer cells distend the ducts and form rosettes. x 120.

rosettes, sometimes papillary projections, and sometimes show central necrosis of the cell masses. In every case the cells grow into the lumen unsupported by any fibrous framework. No definite evidence of infiltration of the tissues outside of the ducts is observed. The few groups of acini and small ducts shown do not exhibit any cancerous changes.

Comment.—This is an intraductal carcinoma of the breast which is very widespread. In spite of this widespread cancerization, no extraductal invasion is noted. In spite of the failure to find stromal invasion, one should assume that it has occurred in some area since in no other way can the frequency of axillary metastases be accounted for in tumors of this sort. A higher percentage of cures is obtained in intraductal cancers than in the average breast cancer.

It is frequently quite difficult to be certain whether or not one is dealing with cancer when there is marked intraductal proliferation of cells without evidence of invasion outside of the ducts. The criteria which I have found helpful and apparently reliable in differentiating between the two are these: If the lesion is simple hyperplasia or benign neoplasm, the cells, whether solidly packed or with a papillary arrangement, are supported upon delicate strands of fibrous tissue and when examined individually do not have the characteristics of cancer cells. If the proliferation is cancerous, on the other hand, the cells will more or less completely fill the lumen without any fibrous support. They may form rosettes producing a lacy pattern in cross section or papillary projections or the entire core may be necrotic resulting in the formation of cylinders of pasty material. Most important is the fact that the individual cells have the histological features of cancer cells.

DISCUSSION OF CASES 16 AND 17

Audience Member: Have you ever had occasion to label breast lesions cystic disease with excessive epithelial hyperplasia with the understanding that this is a precancerous lesion?

Dr. A. P. Stout: In my mind very frequently, but in the diagnosis that we give to the surgeon or the clinician taking care of the case, no. We either call the case carcinoma or not carcinoma. We do not say the lesion is precancerous. We have been trying to determine the relationship of cystic disease with epithelial hyperplasia to cancer for a long time. If one takes an autopsy population of all ages of women and makes sections of the breasts, it develops that the incidence of proliferative changes in the breast is very low, 4 per cent, or less, according to Semb.* The breasts of cancer patients, however, show proliferative evidence in more than 75 per cent. One is tempted to believe this is a very significant difference. In spite of this we are not yet willing to advise the wholesale removal of breasts in which a diagnosis of cystic disease with epithelial hyperplasia is made by biopsy. My associate, Dr. C. D. Haagensen, is running a cystic disease clinic for women in whom the diagnosis has been made but who have not had complete mastectomies. These patients are being followed indefinitely to see how many will develop cancer. The latest figures available show a 4 per cent cancer rate, which is almost exactly the same as for the adult female population in the United States, so that at present we do not do any prophylactic removals of breasts except in very exceptional instances.

If a woman has a familial history of cancer of the breast on the mother's side, I

*Semb, C.: Fibro-Adenomatosis Cystica Mammae, Acta Chir. Scand. 64 Supp. 10, 1-483, 1928.

think she has a greater expectancy of cancer of the breast than an ordinary person, and if she shows persistent duct epithelium hyperplasia in her breast, it may be well to do a mastectomy and avoid the use of large amounts of estrogenic hormone. Those are the only kinds of cases in which mastectomies are done with the exception of one other variety. We have found that the women who have intraductal papillary adenomas at a distance from the nipple apparently have a much better chance of developing cancer than the average, so if we find such multiple tumors in a woman's breast away from the nipple, we think it proper to remove the breast as a prophylactic measure.

Dr. A. Beach, San Antonio: In a case similar to that with an intraductal papillary tumor in one breast (near the nipple) and away from the nipple in the other breast (approximately 4 cm. away), would you suggest removing both breasts?

Dr. A. P. Stout: The one up near the nipple you do not need to worry about at the present time. The one away from the nipple should be followed very carefully and if another develops then take the breast off. We have made the mistake once or twice of repeated simple excisions of recurring papillary tumors developing at a distance from the nipple and have felt chagrined at having the patients return to us with cancers.

Capt. A. Hartman, San Antonio: Does Dr. Haagensen insist on a biopsy?

Dr. A. P. Stout: We are following a good many women who have lumpy breasts and whom we assume have chronic cystic disease, but of course, if no biopsy has been done, one cannot know what degree of hyperplasia they have. It has not been our custom to biopsy lumpy breasts unless there is a single dominant lump. These are always investigated.

Dr. D. Jackson, San Antonio: Do you advise the surgeon to do a simple mastectomy when it is away from the nipple?

Dr. A. P. Stout: Yes. We have been debating the point whether it should be done immediately upon discovery of the papillary tumor away from the nipple, but in every case in which a second papillary tumor has appeared we without hesitation take the breast off.

Col. H. R. Livesay, Eighth Service Command Laboratory, San Antonio: What is your advice when the cystic disease is widespread?

Dr. A. P. Stout: I think it should be watched. I hope I live long enough to learn the proper indications for prophylactic mastectomy. One hesitates to do such a deforming operation until the indications for it are very clear.

Dr. Jackson: Your dividing line, then, would be the bleeding papillary tumor or the one away from the nipple?

Dr. A. P. Stout: Yes. We do not worry particularly if they form another right in the nipple zone but we do worry if they form one out at a distance.

Lt. Col. H. Davenport, Brooke General Hospital: What do you think of the advisability of doing a punch or aspiration biopsy of breast tumors?

Dr. A. P. Stout: There is a school headed by the Memorial Hospital that is very enthusiastic about punch or needle biopsies of breast tumors and they have become very skillful at their interpretation. If one adheres to the rule that a negative punch biopsy necessitates incisional biopsy, probably no great harm is done because one can go right ahead after the punch biopsy with a radical operation. I know that the punch biopsy can spread tumor cells in the tract of the punch because I have seen it demonstrated. Whether it ever leads to blood-borne metastasis, I have no proof. If it leads to lymphatic-borne metastasis it means no great harm is done if a radical operation is performed without delay. We have found that in the cases of cancer of the breast where either the tumor or a biopsy was removed and anywhere from one to twelve days elapsed before a radical mastectomy was done, the results were just as good as those in which the radical operation was done immediately with or without a frozen section. I think that the cases in which local excisions are done belong usually to the fairly early and more favorable forms of cancer because they are mistaken clinically for benign tumors. This may account for the fact that statistically they seem to do as well as those patients who are treated by primary radical mastectomy. I would not choose to wait if it could be avoided.

At the Presbyterian Hospital we do not use punch biopsies at all for the breast because we prefer not to go through that period of uncertainty if the biopsy is negative and because we prefer not to have any period of waiting between the taking of the biopsy and the radical operation. It can be avoided if the patient is admitted to the hospital and a frozen section done. It may be convenient to make the diagnosis by punch biopsy but I personally think it is safer to use incisional biopsy, frozen section, and immediate radical mastectomy if cancer is found. In regard to the punch biopsy for other kinds of tumors, I am a good deal stronger against it in tumors

of the soft parts and extremities because there is a greater danger of blood-borne metastasis of malignant sarcomas by poking them with a needle than by taking a carefully controlled biopsy with a knife, to say nothing of the great advantage of an adequate amount of tissue for study and diagnosis.

Dr. H. J. Schattenberg, San Antonio: How about the diagnosis of cancer by getting secretions from the nipple?

Dr. A. P. Stout: It is splendid if you can make the diagnosis. We have not used it at all. Perhaps, Dr. Severance, you will anticipate what you will have to say at the surgical meeting next week?

Dr. A. O. Severance, San Antonio: We have examined the secretions from breasts in 974 cases and in 131 we have found what we think are tumor cells. These have been followed up at operation in 51 instances. In 38 of these 51 cases, we actually found papillary tumor and in the others the doctor did not get it or the pathologist was not able to recognize the tumor cells. So our batting average is 74.5 per cent. We found 3 cases where we thought those cells were malignant cells.

Dr. A. P. Stout: What happened to all those 843 others that were not brought to operation?

Dr. Severance: The rest had no secretion from the nipple. They did not all have a spontaneous discharge. There were 974 with secretions; of those 131 had tumor cells; of those 51 were operated on, and of the 51, 38 had tumor cells, and of these, 3 had cancer.

Dr. A. P. Stout: If there is any possibility of its being a cancer I should not want to see that breast manipulated or squeezed to obtain secretion because I have the strong impression that cancer of the breast can be spread by manipulation or rough handling much more readily than by incisional biopsy. We are very exigent with our students in trying to teach them from the beginning extreme gentleness in examining the female breast in any and all instances.

Dr. Jackson: I have been obtaining the material which Dr. Severance examined. In doing this we do not traumatize the tumor nor do we manipulate the breast—only by taking the nipple and gently squeezing it down so that the tumor or the growth in the area of the breast is not manipulated in any way; we attempt to obtain the secretion in the nipple, beyond the tumor.

Dr. A. P. Stout: If you could really confine your manipulations only to the nipple and not carry it to the mammary gland itself, there would probably be no harm. It is fairly seldom that one encounters cancer cells microscopically in the nipple ducts when the cancer is at a distance from the nipple, but occasionally they may be found.

Dr. Severance: About Case 16—I looked at that and missed the diagnosis of a cancer because I did not use your criteria. To me everything was in the ducts and the cells looked orderly and there were no mitotic figures. And because I did not use your fine criteria and did not "stick my neck out" and call it cancer, "I missed the boat." In the second case I had no trouble.

Dr. A. P. Stout: Having observed patients with duct cell changes similar to those found in Case 16 return with axillary metastases after partial mastectomy, I always advise a radical operation when they are found. It is possible that a simple mastectomy might cure some cases but no one can guarantee a cure by that procedure. It does not seem fair to the woman not to remove all the axillary nodes when it is possible there may be metastases in them.

Major M. M. Rice, San Antonio: What is the present reaction about fibrosing adenomatosis?

Dr. A. P. Stout: It was given that name by Dr. Ewing and it has been called just simple adenosis by Dawson,* of Edinburgh. I think the chief headache connected with that lesion is for the pathologist in differentiating it from cancer, because fibrosis occurring around terminal ducts and acini which have proliferated simulates the appearance of infiltrative growth. If the individual cells of the acini and ducts are studied, it will be found that they do not have the characteristics of cancer cells. I do not know whether or not adenosis is a precancerous lesion. I believe that most breast cancers come from duct epithelium rather than from acinar epithelium.

Major Rice: What is the definite hormonal relationship there?

Dr. A. P. Stout: I suppose it is all hormonal stimulated hyperplasia, but how it works is beyond me. I cannot understand why hormonal stimulation results in hyperplasia of isolated areas leaving other portions of the same breast unaffected. Moreover, I cannot understand why hormones cause epithelial hyperplasia suddenly after years of no effect. In fact, the whole relationship is a most confused one.

Dr. T. C. Terrell, Fort Worth: How about those patients who had a malignancy in other parts of the body and some of them

*Dawson, E. K.: Mammary Cancer and the Menopause, Edinburgh M. J. 50:721 (Dec.) 1943.

are given as high as four milllion units of hormone and no change is found at all?

Dr. A. P. Stout: I think you can find experiments that will prove anything in relationship to the breast that you want to prove. That is why it is so confusing. I feel it is almost a mistake to make any kind of a statement in regard to the effect of hormones on the breast.

Dr. P. Brindley, Galveston: Do you find tumors in which you wonder whether or not hormone therapy contributed to their development?

Dr. A. P. Stout: I think that I can make a fairly definite answer to this question. We became greatly interested and concerned by the very widespread use of hormones in the treatment of menopausal symptoms. It seemed important to discover whether there was any danger connected with their use, and there are several things that can be said. In the first place, if it is possible to compare the effects of the use of hormones to produce cancer in mice with humans, then it can be said that it is necessary to use dosages in mice that are far greater per unit of body weight than are ever used in women.

We have come to the conclusion that the only women in whom it is dangerous to use hormone therapy in any great quantity are those with a definite familial history of breast cancer in their female relatives. It would probably be wise not to give them the hormones. We have seen one woman with a history of breast cancer in mother and one sister who developed a breast cancer after prolonged estrogenic treatment for menopausal symptoms. Her cancer was very unusual because it seemed to have multiple foci of origin throughout many of her ducts and she had a great amount of hyperplastic mammary tissue.* The number of women with that history is not great.

Dr. J. L. Goforth, Dallas: What would you say about the use of the opposite—the male hormone—testosterone?

Dr. A. P. Stout: All I can say is that androgens used in women can have effects on other portions of the body which may be very unpleasant. We have not used them for painful lumpy breasts because of this and because reliable observers who have tried them do not recommend their use for this purpose. I am told that they have been used successfully as palliatives in advanced breast cancer but I have no personal knowledge of this†.

Dr. Terrell: What about the theory that a virus in the milk fraction is responsible for cancer in mice?

Dr. A. P. Stout: Work is in progress on the milk factor in many places including our own laboratory. The milk is fractionated and the various fractions are being tested in an attempt to learn more about the chemical composition of the milk factor. The work is not far enough along to make any definite statements about it. It is possible that it may be a virus, in spite of the long interval between nursing and the development of cancer. I think it is impossible to say whether or not these mouse observations can be applied to humans.

Dr. J. E. Robinson, Temple: We do know that once they have the herpes virus they have it always, do they not?

Dr. A. P. Stout: That, I do not know.

Dr. Robinson: On slide 17 (Fig. 17) there is a much denser fibrosis of the periductal type. Does the periductal type of proliferation have anything to do in your opinion with whether that tumor is malignant or nonmalignant?

Dr. A. P. Stout: I do not see, really, how one can say much about the relationship of the stroma here, for the tumor has not yet grown outside of the ducts, and I would not dare predict any relationship of stroma to malignancy. I have not found that the so-called scirrhous type of carcinoma is any more or less malignant than carcinomas without associated fibrosis.

Audience Member: Does it have anything to do with the duration?

Dr. A. P. Stout: Not statistically in the large group of cases. Some fibrous breast cancer patients live a long time before the metastases carry them off, while others with tumors of almost identical morphology die with metastases in a very short space of time.

EOSINOPHILIC GRANULOMA OF SPINE OF LUMBAR VERTEBRA

Case 18

History (presented by Lt. Col. H. Davenport, Brooke General Hospital).—A. M., 11 year old white girl, was admitted to the hospital with the history of having bumped her back on a sink while playing three months before. The injured area became painful two weeks later and she had fever for three days. She complained of moderate, nonradiating pain in that region for three weeks prior to admission. However, she was able to walk and play during that time. She had no fever or cough on admission. There were no positive physical findings except for tenderness and swelling over the twelfth thoracic spine. The tuberculosis patch test and x-ray study of the chest were negative. A skeletal x-ray survey showed absence of posterior spinous process of L-1, and erosion of the anterior surfaces of C-4 and 5. Erythrocytes and leukocytes

*Auchincloss, H., and Haagensen, C. D.: Cancer of the Breast Possibly Induced by Estrogenic Substance, J. A. M. A. 114:1517 (April 20) 1940.

†Prudente, A.: Postoperative Prophylaxis of Recurrent Mammary Cancer with Testosterone Proprionate, Surg., Gynec. & Obst., 80:575 (June) 1945.

were normal throughout hospitalization. At operation, the spinous process of L-1 was absent. A granulating cavity, which contained no pus but contained increased fluid, whitish in color, was found. The process extended into the lamina and laterally for a distance of about .5 inch on either side, undermining the lamina. A hemolytic staphylococcus and a gram-positive bacillus, both susceptible to penicillin, were isolated from the material submitted.

Dr. A. P. Stout: *Microscopic Description* (Fig. 18).—The section shows some of the tissue that fills the space occupied by the destroyed spinous process and part of the surrounding musculature. It is very largely

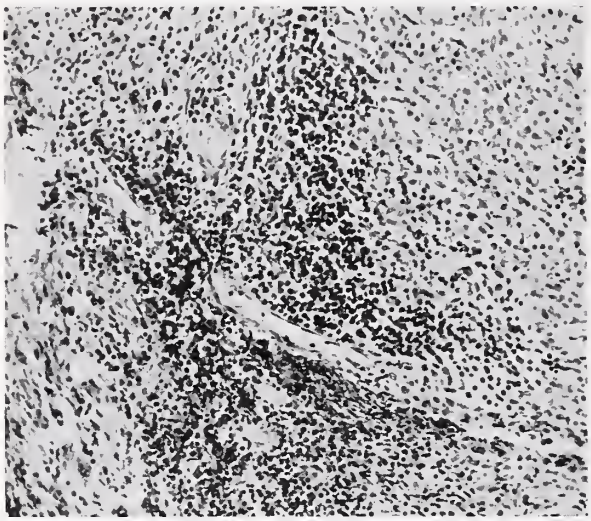

FIG. 18. (Case 18)—Eosinophilic granuloma of the vertebra. The small dark cells are all eosinophilic leukocytes while the large paler ones are mononuclear phagocytes. x 120.

a granulomatous tissue in which there are great numbers of mononuclear phagocytes and a few multinucleated cells. Some of the mononuclear phagocytes have vacuolated cytoplasm. The most striking feature, however, is the presence of vast numbers of eosinophilic leukocytes which redden the tissue in many areas. The granulomatous process invades the surrounding muscle.

Comment.—This is an entirely characteristic clinical and histological picture of eosinophilic granuloma of bone. It is a solitary lesion in a child, destructive of bone and characterized by the presence of many mononuclear phagocytes with numerous dense accumulations of eosinophilic leukocytes, all set in a granulomatous, poorly vascularized framework. There is no other diagnosis possible so far as my experience and reading goes. Green and Farber pointed out that the lesion may be solitary and no other bone lesions may develop or subsequently other bones may be affected, but in either event the disease runs a benign course and the child is ultimately cured. The lesions disappear after curettage or small doses of roentgen-rays or even spontaneously. It is the opinion of Gross and Jacox as well as Green and Farber that the lesion is related closely to Hand-Christian-Schuller disease and probably represents a mild and relatively innocuous form of it. Exclusive of this one we have records of 9 cases of this disease in the Surgical Pathology Laboratory of Columbia University; 3 of them affected the bones of adults 20, 30, and 35 years of age respectively, while the rest were in children.

REFERENCES

1. Gross, P., and Jacox, H. W.: Eosinophilic Granuloma and Certain Other Reticulo-Endothelial Hyperplasias of Bone, Am. J. M. Sc. 203:673 (May) 1942.
2. Green, W. T., and Farber, S.: "Eosinophilic or Solitary Granuloma" of Bone, J. Bone & Joint Surg. 24:490 (July) 1942.
3. Kernwein, G. A., and Queen, F. B.: Solitary Eosinophilic Granuloma, Surgery 14:105 (July) 1943.

DISCUSSION OF CASE 18

Dr. B. F. Stout, San Antonio: Is eosinophilic granuloma a new disease or one that has just gone unrecognized?

Dr. A. P. Stout: I imagine it has just gone unrecognized.

Dr. M. D. Bell, Dallas: Has trauma anything to do with its etiology?

Dr. A. P. Stout: In other cases, a certain proportion of them have given a history of injury. Perhaps that just called attention to the lesion. Have you had any experience like that ?

Dr. Bell: I have seen 2 cases; both of the patients claimed an injury.

Dr. A. O. Severance, San Antonio: In line with that, when did you see your first case of this disease?

Dr. A. P. Stout: I cannot remember exactly; about four years ago.

Dr. Severance: The first time we showed one of these, Colonel Livesay asked had he missed them all these years or were they something new.

Dr. A. P. Stout: Someone showed me the case and I happened to have read about the disease so that I was able to recognize it. After that Dr. Beryl Paige, Pathologist of Babies Hospital, showed me slides of 5 cases in young children. I have seen 1 or 2 cases a year since that time.

Audience Member: Do they ever involve long bones?

Dr. A. P. Stout: Yes. They usually do not but they can. In a couple of our cases the long bones were involved.

ADENOFIBROMA OF BREAST

Case 19

History (presented by Dr. H. J. Schattenberg, San Antonio).—A white woman, age 22, about one month previously noticed a small lump in her right breast.

During the last month, it had increased in size rapidly and had become painful. At the time of examination the mass was the size of a walnut. It was freely movable and was not fixed to the skin. On gross examination of the resected tumor mass, it was noted that the mass consisted of a neoplasm, ovoid in shape, which measured 3 by 4 cm. It showed fair encapsulation; it was of a pink color and was of a rather firm consistency.

Dr. A. P. Stout: *Microscopic Description* (Fig. 19).—The slides show two portions of the breast tumor, both of which are comparable. Inside of the capsule there has occurred a tremendous proliferation of ducts, usually lined with a single or double layer of

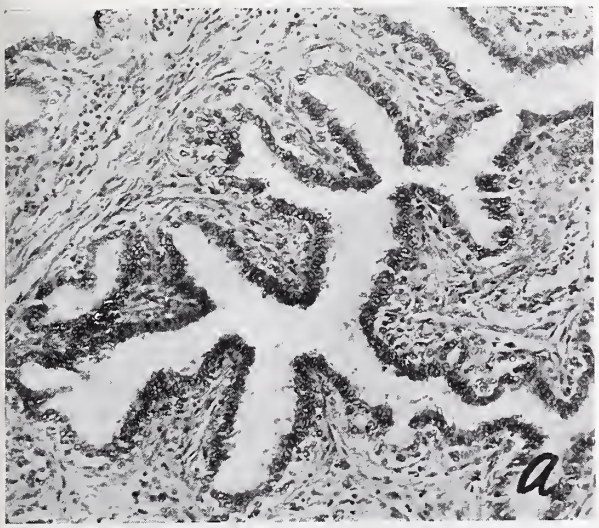

FIG. 19. (Case 19)—Adenofibroma of the female mammary gland showing marked proliferative activity of the ducts but no evidence of malignant change. x 120.

differentiated epithelial cells. The inner row of cells is usually cylindrical. The ducts have many tortuous branches and they seem to fill the space inside of the capsule except for a rather inconspicuous fibrous supporting stroma. All of the cells appear well differentiated and there is nothing suggestive of cancer. Outside of the capsule is a small amount of compressed mammary tissue.

Comment.—This is a very interesting and unusual type of adenofibroma of the breast in which there has been an enormous proliferation of ducts. It is entirely orderly and there is no suggestion of malignancy. It has always seemed to me very questionable whether or not such a localized proliferation of mammary tissue with its accompanying fibrous stroma is a true neoplasm. There is usually nothing distinctive about the epithelial cells which enables one to distinguish them from hyperplastic duct cells and the apparent capsule which surrounds some of them is usually composed only of compressed mammary tissue which does not truly separate the nodule from the breast. I look upon the fibroepithelial tumors of the breast as localized hyperplasias rather than as true neoplasms. It is also questionable whether or not carcinomas ever develop from these fibroepithelial proliferations. In my experience I have never encountered satisfactory proof that they do.

ADENOFIBROMA OF BREAST SIMULATING CYSTOSARCOMA PHYLLODES

Case 20

History (presented by Dr. H. J. Schattenberg, San Antonio).—R. B. G., a white woman, age 40, had noticed a tumor mass in the breast for almost a year. In recent months, this had started to grow rapidly. Gross examination of this tumor revealed a neoplasm the outer surfaces of which were rather rough and nodular. The tumor mass appeared to be well circumscribed. It was firm and hard to palpation. It cut with increased resistance. The cut section was of a pink color and presented a number of cystic areas which varied from a few millimeters to 1 cm. in diameter.

Dr. A. P. Stout: *Microscopic Description* (Fig. 20).—Both sections show a mass of fibroblastic tissue which is composed of

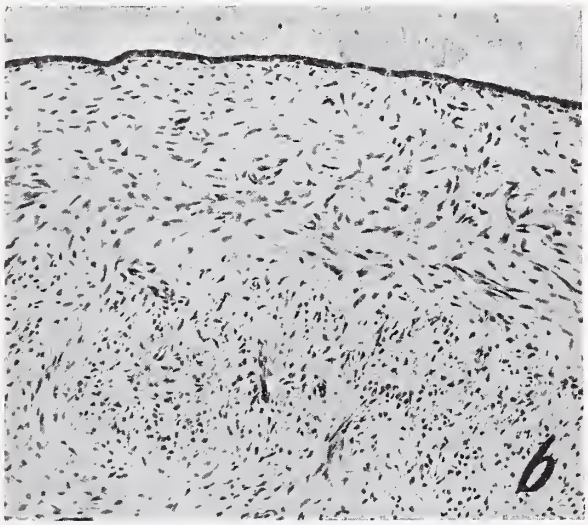

FIG. 20. (Case 20)—Fibrous adenofibroma of the female mammary gland simulating cystosarcoma phyllodes. The lining of one of the dilated cystic cavities is shown above. It rests upon fibroblastic tissue which shows no sarcomatous change. x 120.

spindle-shaped and stellate cells, sometimes arranged in bundles and sometimes with a diffuse arrangement. There are many blood vessels of the order of capillaries which have collapsed lumens and do not contain red blood cells. In one piece of tissue no epithelial structures are seen. In the other there are two elongated, slightly dilated ducts lined with a single layer of epithelial cells. The fibrous tissue surrounding the

ducts seems to have pressed in their walls to a moderate degree.

Comment.—In this case we seem to be dealing with a tumor of the breast of recent rapid growth which is made up very largely of fibroblastic tissue and a very few widely scattered ducts, some of which are slightly cystic. The questions to be discussed concern malignancy and nomenclature. In my experience a tumor such as this is entirely benign and represents simply an enormous overgrowth of the fibrous elements of a benign adenofibroma. When Hill and I studied breast sarcomas we excluded all of the giant adenofibromas. In the group of tumors called by the various names of cystosarcoma phyllodes, adenofibrosarcoma, giant intracanalicular fibroadenomyxoma, and so forth, a simple adenofibroma undergoes great enlargement because of the fibrosarcoma-like proliferation of its stroma. Unless this feature is present there seems no justification for use of the name "sarcoma." Although distant metastases have occasionally been reported, they are very rare and lymph node metastases are unknown. Like others we noted the occasional occurrence of cartilaginous metaplasia of the stroma and squamous metaplasia of the epithelium. I would therefore consider the present tumor benign and classify it as a giant adenofibroma.

REFERENCE

1. Hill, R. P., and Stout, A. P.: Sarcoma of the Breast, Arch. Surg. 44:723 (April) 1942.

DISCUSSION OF CASES 19 AND 20

Lt. Col. H. Davenport, Brooke General Hospital: Do you think that in order to justify the diagnosis of fibroadenoma the lesion should be encapsulated?

Dr. A. P. Stout: If this term is applied only to the truly encapsulated tumors that are surrounded by a fibrous capsule without any glandular elements in it at all, then very few such tumors are found in the breast. I think custom has decreed that tumors sharply circumscribed with a capsule of compressed mammary tissue, such as this Case 20 has, are generally called adenofibromas, but, as I said before, I doubt considerably whether they are true neoplasms.

RETICULUM CELL TYPE OF EWING TUMOR OF TIBIA

Case 21

History (presented by Dr. A. O. Severance, San Antonio).—Mrs. J. O. F., age 45, was first seen July 3, 1945. One year ago the patient developed an aching pain in the left ankle. Six months ago she developed much swelling about the ankle. Swelling had steadily increased. When she presented herself she had a large tumor over the medial side of the left leg in the lower half. The roentgenogram showed slight elevation of the periosteum. July 17, 1945, a spongy tumor was removed from the lower one-third of the left leg. It came in two pieces measuring 8.5 by 8 by 4 cm. and 6.5 by 1.6 by 1.4 cm. The cut surface, mottled red, gray, and brown, was not completely removed; bone and periosteum were attached at one point. On July 27 the left leg was amputated in the lower third of the thigh. Laboratory data were as follows: Kahn, negative; slight anemia, 65 per cent hemoglobin, and 3.89 erythrocytes. September 1 the wound was well healed and the patient had no pain. However, she had recently noticed a tender lump in the right groin. She was referred to Dr. F. M. Davis to begin roentgen-ray therapy over the stump and groin.

Dr. A. P. Stout: *Microscopic Description* (Fig. 21).—The section shows a tumor made up of irregularly rounded and slightly compressed cells closely packed together and supported by a delicate framework of fibrous tissue. Where it is possible to see the individual cells, they do not seem to have formed any connective tissue fibers. The

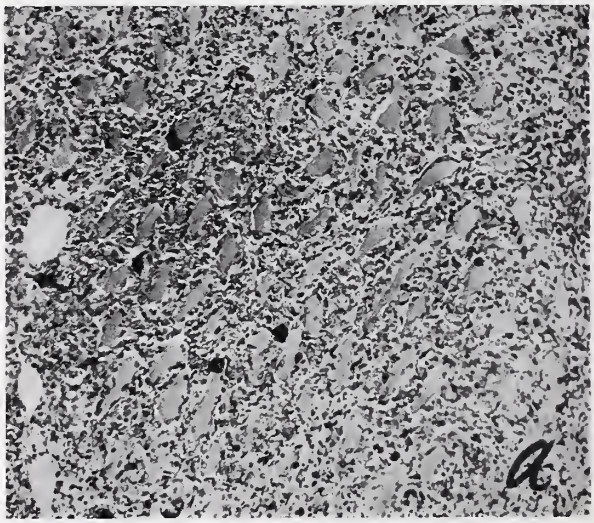

FIG. 21. (Case 21)—Ewing tumor (reticulum cell type) of the tibia. Invasion of striated muscle by the tumor cells. The small dark cells are degenerate. The black spots are artefacts. x 120.

tumor infiltrates freely between fat cells and striated muscle fibers and the biopsy seems to have been taken from outside of the bone. A great deal of the tumor has undergone necrosis.

Comment.—The diagnosis of bone tumors from small fragments of tissue obtained by biopsy is exceedingly difficult because a number of tumors are characterized by an extreme cellular variation in different parts of the same tumor. The pathologist should avail himself of every scrap of knowledge obtainable and see the roentgenograms before venturing a diagnosis, and even with all these aids it is all too easy to be led astray. It has always been my practice to exclude as many lesions as I can and then concentrate

upon the remaining possibilities. In the present case one can feel quite confident that the lesion is a malignant neoplasm because of the way in which its cells infiltrate the muscle outside of the bone. It is therefore possible to exclude all non-neoplastic lesions, all benign tumors, and all metastatic epithelial tumors. The tumor cells are rounded or occasionally slightly elongated, relatively uniform in size where they are well preserved, and grow in masses with a fibrous framework but relatively few intercellular reticulin fibers. The newly formed tumor masses undergo rapid necrosis. There are no differentiating features suggesting the formation of osteoid or cartilage.

These facts enable one to exclude chondrosarcoma and the sclerosing form of osteogenic sarcoma, since both of these would have some degree of differentiation which would betray them. This narrows the field down to tumors originating from the hematopoietic and reticulo-endothelial systems and the osteolytic form of osteogenic sarcoma. Of these by far the most probable is a tumor composed of reticulum cells. The cellular morphology is in favor of this and also the way in which the tumor has grown, penetrating the cortex, elevating the periosteum, and, by invasion of the surrounding tissues forming a large bulky tumor outside of the bone. This is very characteristic of Ewing tumor but not at all characteristic of the osteolytic variety of osteogenic sarcoma.

The question of whether this tumor should be called a reticulum cell sarcoma of bone or a reticulum cell type of Ewing's tumor depends upon whether one adheres to Ewing's or Oberling's hypotheses regarding Ewing's tumor. Ewing believed that his tumor is derived "from vascular endothelium with angioblastic properties" and was incapable of forming reticulum cells. Oberling, on the other hand, believed that it is a "reticulosarcoma, that is to say, a tumor derived from the young reticular cell" and he thought that it is capable of forming a variety of more differentiated forms, including the reticulum cell. Those who agree with Ewing, notably Parker and Jackson of Boston, would therefore call this tumor a reticulum cell sarcoma of bone. These authors believe that this variety occurs in older people and is somewhat less malignant than the more common variety of Ewing tumor. In my experience there is no difference in relative malignancy. All of them are exceedingly malignant and of the cases which I have studied only about 4 per cent have been cured more than five years, whether treated by radiotherapy or surgery.

REFERENCES

1. Parker, F., Jr., and Jackson, H., Jr.: Primary Reticulum Cell Sarcoma of Bone, Surg., Gynec. & Obst., 68:45 (Jan.) 1939.
2. Stout, A. P.: A Discussion of the Pathology and Histogenesis of Ewing's Tumor of Bone Marrow, Am. J. Roentgenol. 50:334 (Sept.) 1943.
3. Swenson, P. C.: The Roentgenologic Aspects of Ewing's Tumor of Bone Marrow, Am. J. Roentgenol. 50:343 (Sept.) 1943.

PLASMA CELL MYELOMA (BILATERAL) OF TIBIA

Case 22

History (presented by Major M. M. Rice and Lt. Col. H. Davenport, Brooke General Hospital).—J. M. E., a white woman age 21, received a local injury to the left knee two months prior to admission. Mild pain, with mild heat, and tenderness persisted. No symptoms were referable to the right leg or knee. On roentgen-ray examination, large irregular cystic radiolucent areas were found in similar areas in the upper ends of both tibias. The left tibia was explored and two soft areas were found which contained soft, friable, brownish-red hemorrhagic tissue. The right tibia was not explored. There were no systemic findings or complaints. Blood proteins were normal. Bence-Jones protein was not found in urine. No other definite bone lesions were found in a skeletal survey. Lung fields were clear.

Dr. A. P. Stout: *Microscopic Description* (Fig. 22).—The section shows some of the soft tissue which is made up of a great number of closely packed, atypical plasma cells, intermingled in places with occasional lymphocytes, leukocytes, and red blood cells.

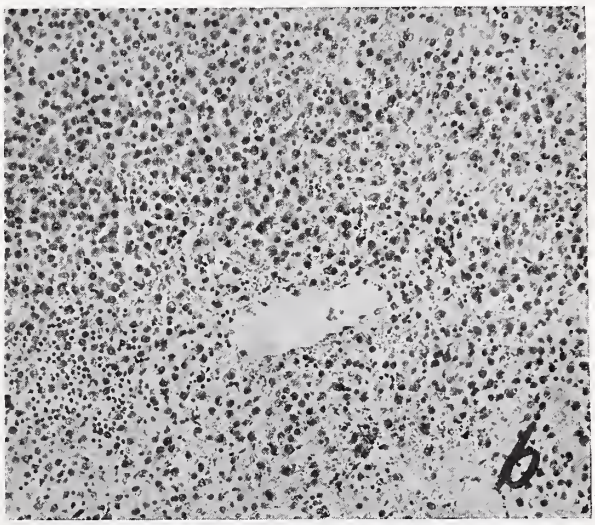

FIG. 22. (Case 22)—Plasma cell myeloma of the tibia. The entire field is filled with neoplastic plasma cells interspersed with a few leukocytes, red cells, and cellular detritus. x 120.

The tumor cells are on the average twice the size of a normal plasma cell. They have, however, the characteristic eccentrically placed nuclei and nuclear material. A few of them show mitoses.

Comment.—This tumor is composed of atypical large cells which, however, show sufficient differentiating features to enable one to identify them. It is common knowl-

edge that when the plasma cell myeloma manifests itself in its usual multiple form involving many bones it is invariably fatal and usually progresses at a fairly rapid pace. The more interesting group comprises those cases which first manifest themselves as solitary tumors of bone marrow. At least 50 of these have been reported and the most recent paper is by Tennent. He pointed out that there is usually an interval of four or more years following the first manifestation of the tumor before multiple involvement of the other bones develops. This fact leads to the belief that some treated cases have been cured, but this is highly questionable because of the long free interval and an insufficient follow-up on many cases. Treatment has been by irradiation, curettage, or amputation. Theoretically, radical surgery should give the best chance because the plasma cell tumors are not particularly sensitive, but not enough data exist to permit definite statements.

It is of interest in this connection to recall that solitary plasma cell tumors occur in situations outside of the bone marrow, as emphasized by Hellwig, who reviewed 128 cases. Most of them developed in the air passages and conjunctivae but a few have been found in other organs. It is very difficult to distinguish between non-neoplastic accumulations of plasma cells, that is, plasma cell granulomas and true malignant neoplasms. The latter are probably very rare outside of the bone marrow. When they are malignant most patients subsequently develop bone marrow lesions and die. The origin of the plasma cell is still under dispute with reticulocytes somewhat favored over lymphocytes, but no conclusions about this have been reached.

REFERENCES

1. Hellwig, C. A.: Extramedullary Plasma Cell Tumors As Observed in Various Locations, Arch. Path. 36:5 (July) 1943.
2. Paul, L. W., and Pohle, E. A.: Solitary Myeloma of Bone: Review of Roentgenologic Features, with Report of Four Additional Cases, Radiology 35:651 (Dec.) 1940.
3. Tennent, W.: Plasmocytoma of Bone, Brit. J. Surg. 32:471 (April) 1945.

DISCUSSION OF CASES 21 AND 22

Major Rice: Here is additional history in Case 22. Following the biopsy the Bence-Jones protein test on the urine was positive on one occasion.

Dr. A. P. Stout: I have been wondering whether one should class this case in which both tibias but no other bones were involved as a case of multiple myeloma of plasma cell type or in the second group of solitary plasma cell tumors. That is, I am wondering whether the patient in this case will have a long survival or a short one.

Major Rice: The patient was transferred to another center and as far as I know, there is no history of development of other lesions. Roentgen interpretation was that of a giant cell tumor.

Dr. A. P. Stout: The radiologists are not infallible either.

Audience Member: Might this lesion be compatible with plasma cell leukemia?

Dr. A. P. Stout: I cannot answer that. I do not know. I feel confident that plasma cell leukemia is an entity but I do not think that it has the type of bone marrow lesions which characterize the multiple myeloma of the plasma cell type. I imagine they are somewhat different diseases.

Audience Member: How often do you believe sternal marrow aspiration aids the diagnosis in these cases?

Dr. A. P. Stout: I would hate to have to make that diagnosis unaided by anything else like the Bence-Jones reaction or multiple lesions by roentgen-ray study. If I had those aids, I might be willing to make the diagnosis. If I did not, I would only suggest it. If there are multiple bone lesions exhibited by roentgen study and plasma cells can be obtained by sternal marrow aspiration, I think it would be proper to make the diagnosis.

Major M. E. Cox, Camp Robinson, Ark.: In the absence of any definite demonstrable lesion of the sternum itself, would the sternal marrow aspiration be of any help?

Dr. A. P. Stout: It would be of value but not decisive in plasma cell myeloma.

Audience Member: One of our officers was working on blood smears, and though I do not know his figures, he did find plasma cells in the blood stream.

Lt. Colonel Davenport: Is it not quite possible in aspiration material from bone in some of these cases that the tumor cells would look like myelocytes?

Dr. A. P. Stout: Yes, I think so. I have not seen a great many plasma cell myelocytes. If they are found one would not hesitate to believe the process malignant.

ADENOMA (HEPATOMA) OF LIVER

Case 23

History (presented by Dr. A. O. Severance, San Antonio).—In a baby (male) 18 months old a swelling of the upper right abdomen was noted by the family. The doctor thought the painless nontender mass was most likely a tumor of the right kidney, especially since roentgenograms showed an abnormality in the pyelogram. Deep roentgen-ray therapy (2,400 r) was used over the right kidney and lower edge of the liver. At operation, August 6, 1945, the kidney was all right and the peritoneum was then opened. A tumor the size of an orange was found in the right lobe of the liver. The gallbladder was not involved. Aspiration of the mass obtained no fluid. A biopsy was taken. The omentum was

sutured to the biopsy site. Laboratory data were non-essential; the Kahn test was negative; the postoperative course was stormy with "spikey" temperature, fast pulse, and distended intestines. A Miller-Abbott tube was passed successfully with rapid improvement.

Dr. A. P. Stout: *Microscopic Description* (Fig. 23).—The section shows fragments of a tumor of the liver which reproduces the architecture of the liver quite faithfully except that there are no bile ducts or portal system. The individual cells look very much like normal liver cells with acidophilic granu-

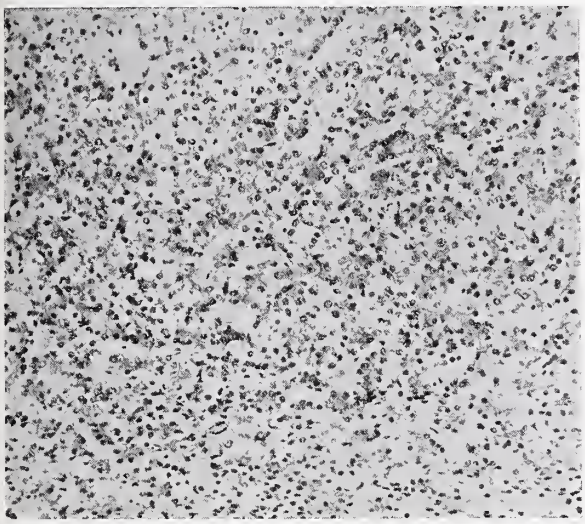

FIG. 23. (Case 23)—Adenoma (hepatoma) of the liver. Cords of anastomosing liver cells and capillaries without any bile ducts. x 120.

lar cytoplasm, sometimes vacuoled. No bile pigment is identified. There is a rather thick capsule provided with a considerable number of capillaries, but not otherwise remarkable.

Comment.—This is a tumor of the liver which reproduces quite faithfully the architecture of the liver with almost normal appearing liver cells, many of which are vacuolated and apparently contain lipoid. No bile ducts have been formed. This type of tumor is generally classified as adenoma or benign hepatoma and most of the successful removals of liver tumors have been for cases of this type. A recent paper by Warvi (1945) reports the successful removal of such a tumor in 2 patients who remained well for eight and a half years and twenty-nine months respectively, while in a third case in which the tumor was incompletely excised the patient died forty-one months after operation from local recurrence. Schrager in 1937 remarked that many writers on the subject emphasize the malignant potentialities of these tumors which can apparently show a variation in the degree of differentiation so that it is important to examine many areas.

If one chooses to call these liver cell tumors hepatomas, they may be divided into the adenomatous or well differentiated form (of which this is an example) and the carcinomatous type.

Surgical removal of such tumors can be attempted if they project from the lower margin of the liver, do not involve the common duct and surrounding structures, and have not metastasized.

REFERENCES

1. Schrager, V. L.: Surgical Aspects of Adenoma of the Liver, Ann. Surg. 105:33 (Jan.) 1937.
2. Warvi, W. N.: Primary Tumors of the Liver, Surg., Gynec. & Obst. 80:643 (June) 1945.

UNDIAGNOSED TUMOR OF KIDNEY

Case 24

History (presented by Lt. Col. P. G. F. Schmitt and Lt. Col. H. Davenport, Brooke General Hospital).—In May, 1944, a 25 year old white soldier had an appendectomy for signs and symptoms in keeping with an acute appendicitis. Six weeks later, he developed pain in the left upper quadrant and exhibited a temperature of 101 F. for two days after which his pain and temperature subsided. However, a mass was felt to be present in the region of the spleen. It was thought to be an enlarged spleen, resulting from thrombosis of the splenic vein. He was asymptomatic until two weeks prior to admission to the hospital. At that time he developed left renal colic and passed gross blood in the urine. The tumor mass and kidney measured 13 by 15 by 17 cm. The tumor measured 13 by 15 cm. The compressed kidney formed a crescent over the tumor mass and was separated from it by a distinct capsule. Fibrous septa which arose from the kidney capsule extended into the tumor and divided it into irregularly-sized and shaped nodules of gray-yellow to white, moderately firm tissue. Areas of hemorrhage and necrosis were present.

Dr. A. P. Stout: *Microscopic Description* (Fig. 24).—Sections show that the tumor

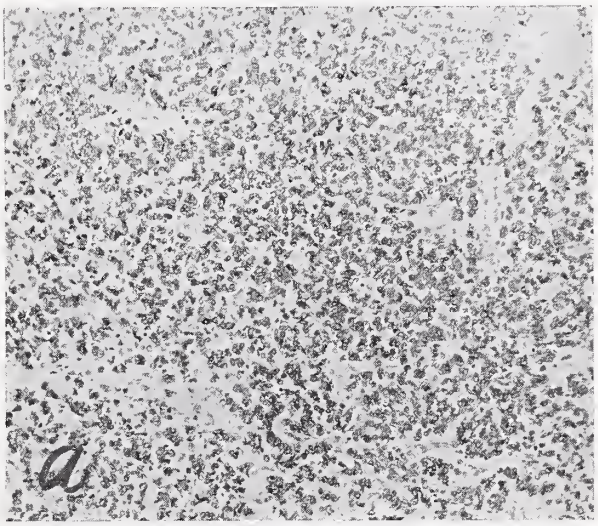

FIG. 24. (Case 24)—Undiagnosed tumor of the kidney. Small rounded undifferentiated cells supported by a fibrous framework. x 120.

is composed of irregularly rounded cells with large prominent nuclei and a barely visible rim of acidophilic cytoplasm surrounding them. The nuclei have clearly defined markings but small nucleoli and mitoses average one in every three or four high power fields. The cell groups are separated by fibrous bands and there is reticulin between some of the cells. The capsule surrounding the tumor contains the atrophic remnants of the kidney and is about 3 mm. thick. No other differentiating features are noted.

Comment.—Obviously this is a rare and unusual tumor form in the kidney. It has the appearance of a sarcoma and more particularly of a reticulum cell lymphosarcoma. But apparently it is highly questionable whether or not such tumors occur primarily in the kidney. Lubarsch referred to a few cases of large round cell sarcoma of the kidney but he refused to be more specific so that one cannot be certain of their nature. It is not uncommon to find foci of metastatic lymphosarcoma invading the kidney parenchyma but not in this form as a large solitary mass. Another possibility which must be considered is neuroblastoma. Again it is very questionable if such a tumor is ever primary in the kidney and for me the tumor cells have neither the arrangement nor the morphology of neuroblastoma. If it is not a sarcoma, one must consider the possibility of a completely undifferentiated carcinoma either primary or metastatic. I can only say that if it is a carcinoma, it is entirely undifferentiated and belongs to a variety with which I am not acquainted. So far as my observations of this tumor go, I am unable to classify it.

REFERENCE

1. Fahr, Th., and Lubarsch, O.: Die Nierengewächse in Henke and Lubarsch Handbuch der Speziellen Pathologischen Anatomie and Histologie Vol. vi/1, J. Springer. Berlin, 1925, pp. 679-684.

HEMANGIOENDOTHELIOMA OF SPLEEN

Case 25

History (presented by Dr. B. F. Stout, San Antonio).—The patient was a woman, age 45, in whom enlargement of the spleen had been noticed for five or six months. The patient complained of pain over the region of the mass and weakness. There was a slight jaundice. Blood count revealed a hypochromic anemia, moderate leukocytosis, and normal differential count. The platelet count was 140,000. Fragility test was normal. Splenectomy showed a spleen weighing 1,600 Gm. which tore very easily in removal with extensive hemorrhage. The operation was performed in August, 1944. The patient has remained well to this date. Gross description: Gross section showed a soft, very bloody pulp with an occasional, very small infarct on the surface.

Dr. A. P. Stout: *Microscopic Description* (Fig. 25).—Five different sections have been prepared and stained with hematoxylin and eosin, trichrome, and Laidlaw. These show that most of the normal splenic architecture has disappeared, although traces of it can be found in one of the sections. There appears to have been a marked proliferation of the vascular system of this spleen, leading to the formation sometimes of hyperplastic sinusoids and sometimes of vascular lakes and channels lined either by a single layer of swollen endothelial cells or sometimes by heaped up neoplastic endothelia,

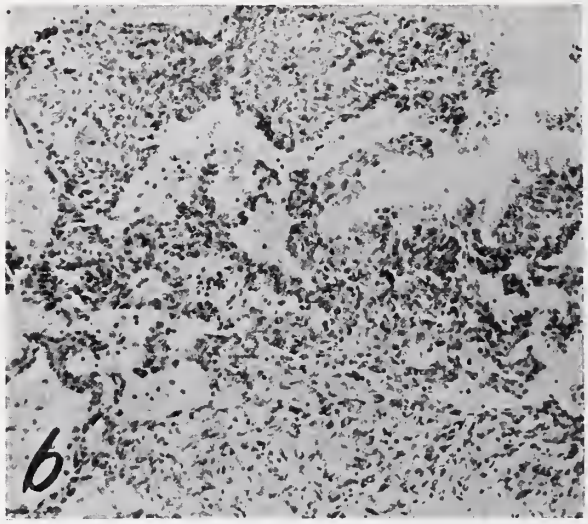

FIG. 25. (Case 25)—Hemangioendothelioma of the spleen. The tumor forms many vascular spaces lined by heaped up endothelial tumor cells. x 120.

forming papillary projections. In these areas the vascular spaces filled with red blood cells tend to anastomose one with the other very freely. In still other places there has occurred a tumor-like proliferation of simple capillaries and even of cords of angioblasts in which no lumen has been formed.

Comment.—This interesting lesion is an example of the type of complex angiomatosis which sometimes affects the liver and spleen or both of them. It takes very varied forms in different individuals and is certainly neoplastic, but is probably not as malignant as the ordinary hemangioendothelioma of the adult. It is a little difficult to know exactly under what category to classify such a lesion, but I am inclined to class it with the hemangioendotheliomas because there are areas in this spleen which reproduce exactly the picture of the malignant hemangioendothelioma. The only alternatives would be to class it as diffuse hemangiomatosis or malformation of the vascular mesenchyme. In my experience, diffuse hemangiomatosis, which usually affects an entire extremity, does not have an embryonal vascular mesenchyme or malignant areas developing in it,

and the only cases of malformations of the vascular mesenchyme which have hitherto been reported have affected many parts of the body and not one single organ. I append some references to somewhat similar cases.

REFERENCES

1. DeNasaquez, S. P.: Angioblastoma of the Spleen with Metastases in the Liver, J. Path. & Bact. 42:651, 1936.
2. Jopson, H. H.: Primary Hemangiomatous Endothelioma of Spleen; Splenectomy, S. Clin. North America 1:235 (Feb.) 1921.
3. Langhans, T.: Pulsirende cavernose Geschwulst der Milz mit metastatischen Knoten in der Leber, Virchow's Arch. 75:273, 1879.
4. Orlandi, N.: Primäres diffuses Hamangioendotheliom der Milz, Virchow's Arch. 269:152, 1928.
5. Provera, P.: (Hemangioendothelioma of Spleen), Boll. d. spec. med. Chir. 2:5, 1928.
6. Stout, A. P.: Tumors of Blood Vessels, Texas State J. Med. 40:362-365 (Nov.) 1944.
7. Wright, A. W.: Primary Malignant Hemangioma of the Spleen with Multiple Liver Metastases, Am. J. Path. 4:507 (Nov.) 1928.
8. Zeno, A., and Cid., J. M.: Hemangio-Endotheliome de la Rate, Ann. d'Anat. Path. 7:583, 1930.

DISCUSSION OF CASES 24 AND 25

Dr. W. R. Matthews, Shreveport, La.: In Case 25, do you expect these lesions to metastasize?

Dr. A. P. Stout: I am quite prepared to have them do so, but whether they will or not, I am not sure. Dr. Stout, do you know what has happened to this patient?

Dr. B. F. Stout: The patient remains well, so far.

Dr. A. P. Stout: The spleen is a very difficult organ to elucidate. Does anyone have any other ideas about that kidney? I think, Colonel Davenport, you favored the diagnosis of neuroblastoma in Case 24.

Lt. Colonel Davenport: No, sir. That was the original diagnosis made. We favored the diagnosis of embryonal carcinoma. The Museum favored neuroblastoma.

Dr. A. P. Stout: I could well believe the diagnosis of embryonal carcinoma because that is a nice vague term about which nobody knows much anyway. I think it is definitely not neuroblastoma. I do not believe any have ever been described similar to this tumor.

Dr. A. O. Severance, San Antonio: Could this tumor arise from the sympathicoblast, the precursor of the neuroblast?

Dr. A. P. Stout: From my knowledge of tumors that have been proved to have arisen from precursors of neuroblasts, this does not look like any of them. I do not think it could.

MISCELLANEOUS

COMING MEETINGS AND CLINICS

State Medical Association of Texas, Galveston, May 6-9, 1946. Dr. H. F. Connally, Waco, President; Dr. Holman Taylor, 1404 W. El Paso St., Fort Worth, Secretary.

American Medical Association, San Francisco, July 1-5, 1946. Dr. Roger I. Lee, Boston, President; Dr. Olin West, 535 North Dearborn Street, Chicago, Secretary.

Southern Medical Association. Dr. M. Y. Dabney, Birmingham, Ala., President; C. P. Loranz, Empire Building, Birmingham, Ala., Secretary-Manager.

Southwest Allergy Forum, Houston, April 8-9, 1946. Dr. George W. Owen, Jackson, Miss., Temporary President; Dr. A. H. Braden, 1910 Crawford St., Houston, Secretary.

Texas Association of Medical Anesthetists, Galveston, May 6, 1946. Dr. E. D. Embree, Houston, President; Dr. R. A. Miller, 1415 Nix Professional Building, San Antonio, Secretary.

Texas Association of Obstetricians and Gynecologists, Galveston. Dr. Allen McMurrey, Houston, President; Dr. Julius McIver, 714 Medical Arts Building, Dallas, Secretary.

Texas Chapter American College of Chest Physicians, Galveston, May 6, 1946. Dr. S. E. Thompson, Kerrville, President; Dr. Elliott Mendenhall, Dallas, Secretary.

Texas Club of Internists. Dr. Robert M. Barton, Dallas, President; Dr. Julian C. Barton, 414 Navarro St., San Antonio, Secretary.

Texas Hospital Association, Fort Worth, March 21-23, 1946. Lawrence Payne, Baylor Hospital, Dallas, President; Miss Madelyne Sturdavant, 5709 Velasco, Dallas, Secretary.

Texas Neuropsychiatric Association, Galveston, May 6, 1946. Dr. Titus Harris, Galveston, President; Dr. Fred Rogers, Dallas, Secretary.

Texas Ophthalmological and Otolaryngological Society, Dallas, December, 1946. Dr. C. B. Williams, Mineral Wells, President; Dr. E. D. Dumas, San Antonio, Secretary.

Texas Orthopedic Society. Dr. E. A. Cayo, San Antonio, President; Dr. Edward Smith, Houston, Secretary.

Texas Pediatric Society, Fort Worth, October, 1946. Dr. Max Woodward, Sherman, President; Dr. John E. Ashby, Dallas, Secretary.

Texas Public Health Association. Major Lewis Dodson, C. E., Headquarters Eighth Service Command, Dallas 2, Texas, President.

Texas Radiological Society, January, 1947. Dr. Herman Klaproth, Sherman, President; Dr. R. P. O'Bannon, 650 Fifth Ave., Fort Worth, Secretary.

Texas Railway and Traumatic Surgical Association, Galveston, May 6, 1946. Dr. W. B. Reeves, Greenville, President; Dr. Ross Trigg, First National Bank Building, Fort Worth, Secretary.

Texas Society for Mental Hygiene, Galveston, March 7-8, 1946. Dr. Paul L. Boynton, S. F. A. S. T. C., Nacogdoches, President; Mrs. Elizabeth F. Gardner, 1617 Watchhill Road, Austin 21, Executive Secretary.

Texas Society of Gastro-Enterologists and Proctologists, Galveston, May 6, 1946. Dr. James J. Gorman, El Paso, President; Dr. George M. Underwood, 4105 Live Oak Street, Dallas, Secretary.

Texas Society of Pathologists, Galveston, May 8, 1946. Dr. May Owen, Fort Worth, President; Dr. C. T. Ashworth, Southwestern Medical College, Dallas, Secretary.

Texas State Heart Association, Galveston, May 6, 1946. Dr. Victor E. Schulze, San Angelo, President; Dr. Walter B. Whiting, Wichita Falls, Secretary.

Texas Surgical Society, Temple, April 1-2, 1946. Dr. G. V. Brindley, Temple, President; Dr. Walter Stuck, 1426 Nix Professional Building, San Antonio, Secretary.

Texas Tuberculosis Association, September, 1946. Dr. J. B. White, Amarillo, President; Miss Pansy Nichols, Austin, Executive Secretary.

Third Panhandle, District Medical Society, Amarillo, April 9-10, 1946. Dr. D. D. Cross, Lubbock, President; Dr. George Powers, Amarillo, Acting Secretary.

Fourth District Medical Society, Brady, November, 1946. Dr. H. L. Locker, Brownwood, President; Dr. Glenn H. Ricks, Brady, Secretary.

Fifth and Sixth, Southwest District Society. Dr. Phil A. Bleakney, Harlingen, President; Dr. C. W. Tennison, San Antonio, Secretary.

Seventh, Austin, District Society. Dr. Robert B. Morrison, Austin, President; Dr. M. I. Brown, Austin, Secretary.

Eighth, Ninth and Tenth Districts Medical Society, Brenham, April 17, 1946. Dr. J. T. Tadlock, Dayton, President; Dr. George W. Waldron, Medical Arts Building, Houston, Secretary.

Eleventh District Society, Jacksonville, March 28, 1946. Dr. C. B. Young, Tyler, President; Dr. J. M. Travis, Jacksonville, Secretary.

Twelfth, Central Texas, District Society, Corsicana, July, 1946. Dr. Thomas G. Glass, Marlin, President; Dr. H. F. Connally, Jr., Waco, Secretary.

Thirteenth, Northwest, District Society, Eastland, March 28, 1946. Dr. A. L. Roberts, Fort Worth, President; Dr. Joe R. Wise, 1212 W. Lancaster, Fort Worth, Secretary.

Fourteenth District Society, Gainesville, June, 1946. Dr. W. C. Morrow, Greenville, President; Dr. A. L. Ridings, Sherman, Secretary.

Fifteenth, Northeast Texas, District Society, October, 1946. Dr. Frank Littlejohn, Marshall, President; Dr. Henry H. Niehuss, Greggton, Secretary.

CLINICS

Dallas Southern Clinical Society, Dallas, March 18-21, 1946. Secretary, 433 Medical Arts Building, Dallas 1.

MEDICAL OFFICERS RETURNING TO TEXAS*

(Corrections: Sam R. Barnes has returned to Trinity instead of Galveston; Ben T. Withers, Jr., to Houston instead of San Angelo; and Eduardo T. Ximenes to San Antonio instead of Floresville.)

NAME	Serv.†	Location	Release Date
Anderson-Houston-Leon Counties			
2. Carter, James W.	A	Palestine	
Angelina County			
2. Klein, James C.	A	Lufkin	Dec., 1945
Bastrop County			
1. Fitzwilliam, Clare D.	A	Smithville	
Baylor-Knox-Haskell Counties			
3. Taylor, Floyd D.	A	Haskell[1]	
Bell County			
8. Hunter, Richard O.	A	Bartlett	
9. McKay, Edward D.	A	Temple[2]	Mar., 1946
10. Owens, Albert	A	Temple	
Bexar County			
68. Hunt, Kent N.	A	San Antonio	
69. Koontz, Lee A.	N	San Antonio	
70. McCarthy, J. E.	A	San Antonio	
71. May, Lester M.	A	San Antonio	
72. Pomerantz, Robert B.	A	San Antonio	
73. Shaver, Benjamin B.	A	San Antonio	
74. Stone, Joseph R.	A	San Antonio	
75. Swinny, Boen	A	San Antonio	
76. Sykes, Edwin M., Jr.	A	San Antonio	
77. Tyler, Monroe R.	A	San Antonio	
78. Wheeler, M. S.	A	San Antonio	
Brazos-Robertson Counties			
3. Taylor, William C.	N	Calvert	Jan., 1946
Brooks-Duval-Jim Wells Counties			
7. Sory, Crysup	A	Freer	Jan., 1946
Brown-Comanche-Mills-San Saba Counties			
8. Carrigan, Thomas A.	A	Brownwood	
9. Maxwell, Ernest A.	A	Brownwood	
10. Reynolds, Avery M.	A	DeLeon	
Caldwell County			
2. Wilson, Francis	A	Luling	
Cameron-Willacy Counties			
6. Calderoni, Francis		Brownsville	
7. Dashiell, George		Brownsville	
8. Langner, G. R.		Brownsville	
9. Peek, John S.	N	Brownsville	
10. Olcott, Cornelius, Jr.	A	Harlingen	
11. Scanlan, Nestor		Brownsville	
Cherokee County			
2. Marinis, Thomas P.	A	Jacksonville[3]	Jan., 1946
Clay-Montague-Wise Counties			
1. Hurn, Robert E.	A	Henrietta	
Coleman County			
1. Moody, Charles O.	A	Coleman	Dec., 1945
2. Weaver, M. E.	A	Coleman	Dec., 1945
Dallas County			
95. Allison, Wilfred J.	N	Dallas	
96. Bowyer, Mack F.	A	Dallas	
97. Buehler, Martin S.	N	Dallas	
98. Burditt, Bucky L.	A	Dallas	
99. Cairns, Arthur B.	N	Dallas	
100. Collins, Lawrence D.	A	Dallas	
101. Crenshaw, Allen J.	A	Dallas	
102. Devereux, William P.	A	Dallas	
103. Diddle, Albert W.	N	Dallas	
104. Duncan, Horace E.	N	Dallas	
105. Fisher, Rowan E.	A	Dallas	
106. Grow, Max H.	N	Dallas	
107. House, R. Eugene	A	Garland	
108. Hunter, Carroll D.	N	Dallas	
109. Merrick, Benjamin A.	A	Dallas	Mar., 1946
110. Moore, Henry W.	N	Dallas	
Dallas County (Continued)			
111. Norman, Floyd A.	A	Dallas	
112. Peacock, George E.	A	Dallas	
113. Sweeney, James S.	A	Dallas	
114. Truett, Charles B.	N	Dallas	
115. White, Byrd E., Jr.	A	Dallas	
116. Young, Jack G.	N	Dallas	
Dawson-Lynn-Terry-Gaines-Yoakum Counties			
3. Loveless, Robert W.	A	Lamesa	
4. Zee, Urban H.	A	Lamesa[1]	
Denton County			
4. Davis, Berthol E.	N	Denton	
5. Hayes, Lindley O.	A	Denton	
Ector-Midland-Martin-Howard-Andrews-Glasscock Counties			
6. Boyle, Frank B.	A	Big Spring	
7. Mansur, Harl D., Jr.	A	Big Spring	
El Paso County			
30. Awe, Chester D.	N	El Paso	
31. Jordan, Gerald H.	A	El Paso	
32. Prieto, Phillip M.	A	El Paso	
33. Rodarte, R. B.	A	El Paso	
34. Walker, Newton F.	A	El Paso	
Falls County			
3. Smith, Walter S.		Marlin	
4. Wheelis, B. D.	A	Rosebud[2]	
Fannin County			
4. Benson, Clifford D.	N	Honey Grove	
5. Coppleman, W. P.	A	Honey Grove	
6. Steinbach, Herbert L.	N	Bonham	
Galveston County			
19. Beeler, George		Galveston	
20. Danforth, D.		Galveston	
21. Delaney, John J.	A	Galveston	
22. Fisher, William C., III	A	Galveston	
23. Ford, Hamilton		Galveston	
24. Gard, Delmar Ray	A	Galveston	
25. Gilliam, Hughes		Galveston	
26. Griffin, L. L.	A	Galveston	
27. Jinkins, A. J.		Galveston	
28. Kahn, Mason		Galveston	
29. Manske, G. R.		Galveston	
30. Parrish, B. R.		Galveston	
31. Sheckles, Loyd W.	A	Galveston	
32. Spiller, William		Galveston	
33. Stephen, Weldon W.	A	Galveston	
34. Weinert, Herman		Galveston	
Gonzales County			
1. Sievers, Walter A.	A	Gonzales	
Gray-Wheeler Counties			
5. Overton, Marvin C., Jr.	N	Pampa	
Grayson County			
5. Ackert, J. W.	A	Denison	
6. Hotchkiss, Hubert L.	A	Denison	
7. McFarling, James E.	A	Denison	
8. Meitzen, Travis C.	A	Denison	
9. Ross, Edward S.	N	Denison	
Gregg County			
11. Price, Richard O.	A	Kilgore	
12. Roberts, Joseph D., Jr.	N	Longview	
Grimes County			
3. Hamilton, Oscar A., Jr.	A	Richards	
Guadalupe County			
1. Williams, Jesse B.	N	Seguin	Feb., 1946
Hamilton County			
4. West, Robert C.	A	Hamilton	
Hansford-Hemphill-Lipscomb-Roberts-Ochiltree Counties			
2. Pearson, D. B., Jr.	A	Perryton[3]	
Harris County			
135. Ames, Frederick D.		Houston	
136. Andrews, Tom A., Jr.	N	Houston	
137. Bloom, Fred A.	N	Houston	
138. Embree, Elisha D.	A	Houston	
139. Estess, Berthold H.	A	Houston	
140. Graves, Ghent E.		Houston	
141. Halamicek, John F.	A	Houston	
142. Hamrick, W. H.	N	Houston	
143. Harrison, M. W.	A	Houston	
144. Hatfield, Haskell D.	A	Baytown	
145. Henderson, Donald G.	N	Houston	
146. Holland, C. G.		Houston	
147. Hughes, Fred M.	N	Houston	
148. Jerabeck, John D.	A	Houston	
149. Kelley, Richard E.	N	Houston	
150. Klein, Perry B.	A	Houston	
151. Laurentz, Fred K.	A	Houston[4]	

*EDITOR'S NOTE: This list is the fifth of a series in which it is hoped to name all those physicians who have been in the Armed Forces during the war just passed and have now returned to Texas to resume civilian practice. The information in this list has been assembled from a variety of sources. While an attempt has been made to secure as complete and as accurate data as possible, we are aware that omissions and errors have been made. Not only for publication in the JOURNAL but also for the permanent records in the central office of the State Medical Association, we invite and urge correction of and addition to the material here submitted. Note that physicians from each county area are numbered consecutively following those listed in the February JOURNAL; the last number in each section therefore indicates the total physicians returned to that county area. The complete total for Texas named to date (February 25), including the accompanying list, is 965.

† A=Army; N=Navy; U=U. S. Public Health Service.

[1]Formerly of Baltimore, Md.
[2]Formerly of Texarkana, Ark.
[3]Formerly of Dallas.
[1]Formerly of Merkel.
[2]Formerly of Kansas City, Mo.
[3]Formerly of Oklahoma City, Okla.
[4]Formerly of Galveston

NAME	Serv.†	Location	Release Date
Harris County (Continued)			
152. Lewis, Arthur N.	A	Houston	
153. McCulley, J. D.		Houston	
154. Mahone, Marion W.	A	Houston	
155. Nestar, Charles R.		Houston	
156. Ohlhousen, G. G.	A	Houston	
157. Oliver, J. Stanley	N	Houston	
158. Peters, Isadore D.	A	Houston	
159. Pugsley, Cornelius, Jr.	N	Houston	
160. Roberts, Joe H.	A	Houston	
161. Robertson, R. C. L.		Houston	
162. Stackhouse, Howard	N	Houston	
163. Steckler, Milton I.	A	Houston	
164. Swetland, Douglas R.	N	Houston	
165. Wall, John A.		Houston	
Hays-Blanco Counties			
1. Heatly, M. D.	A	San Marcos	
2. White, David L.	N	San Marcos	
Henderson County			
1. Moon, Roy E.	A	Chandler	
Hidalgo-Starr Counties			
7. Osborn, Robert W.	A	McAllen	
8. Reed, Walter E.	A	San Juan	
Hill County			
4. Mabry, James D.	N	Penelope	
Hunt-Rockwall-Rains Counties			
6. Crim, E. Truitt	A	Greenville	
7. Handley, James J.	A	Greenville	
8. Hayes, Elmer R.	A	Greenville	
9. Roan, John L.	N	Commerce	
10. Trimble, Orman H.	A	Greenville	
Jasper-Newton Counties			
3. Baird, William L.	A	Wiergate	
4. Richardson, Arthur J., Jr.	A	Jasper	Feb., 1946
Jefferson County			
33. Byram, Dan H.		Port Arthur	Jan., 1946
34. Matlock, Tom		Port Arthur	Feb., 1946
35. Robert, William P.	N	Beaumont	
36. Williford, Herman B.	N	Beaumont	Dec., 1945
Johnson County			
4. Rudd, Laurence H.	A	Burleson	
Karnes-Wilson Counties			
2. Blake, John V., Jr.	A	Floresville	
3. Quillian, Causey C.	A	Kenedy	
Kaufman County			
4. Shaw, Guy	A	Kaufman	
Kerr-Kendall-Gillespie-Bandera Counties			
5. Post, Samuel P., Jr.	A	Boerne	
Kimble-Mason-Menard-McCullough Counties			
2. McCollum, G. G.	A	Mason	Feb., 1946
Kleberg-Kenedy Counties			
1. Jones, Dean B.	A	Kingsville	
Lamar County			
5. Lewis, Robert	A	Paris[1]	
Limestone County			
4. Carrington, William L.	A	Mexia	
Lubbock-Crosby Counties			
10. Brumage, William S.	A	Lubbock	
11. Gilula, Adolph	A	Lubbock	
12. Smith, William J. B.	A	Lubbock	
McLennan County			
14. Anspach, H. M.	A	Waco	
15. Barnes, Maurice C.		Waco	
16. Curbo, James R.	A	Waco	
17. Holmes, Mansell B.	A	Waco	
18. Sparkman, Robert S.	A	Waco	
19. Wheelis, Brewer D.	A	Waco	
Navarro County			
4. Drane, Hugh A., Jr.	A	Corsicana	
Nolan-Fisher-Mitchell Counties			
5. Dowling, Urban J.	A	Sweetwater	
6. Johnson, Robert H.	A	Hamlin	
Nolan-Fisher-Mitchell Counties (Continued)			
7. Price, Robert L.		Sweetwater[1]	
Nueces County			
15. Ashmore, A. J.	A	Corpus Christi	
16. Barker, William E.	N	Corpus Christi	
17. Colyer, George E.	A	Corpus Christi	
18. Estes, Bates B.	A	Corpus Christi	
19. Sigler, Robert	N	Corpus Christi	Jan., 1946
Orange County			
1. Seastrunk, Oliver C.	A	Orange[2]	Mar., 1946
Palo Pinto-Parker Counties			
6. Roberts, Charles J.	A	Mineral Wells	
Potter County			
12. Haugen, Ingvald J.	A	Amarillo	
San Patricio-Aransas-Refugio Counties			
4. Kildee, Henry A.	N	Portland	
Shelby-San Augustine-Sabine Counties			
3. Arnold, Hugh F.	A	Hemphill	
4. Long, D. O.		San Augustine	
Smith County			
3. Caldwell, Elbert H.	N	Tyler	
4. Faber, Edwin G.	A	Tyler	
5. Rhine, Leland R.	N	Tyler	
6. Wilcox, Melvin, Jr.	A	Tyler	
Stephens-Shackelford-Throckmorton Counties			
2. Curb, Delos G.	N	Albany	
Tarrant County			
50. Cyrus, Elbert M., Jr.	N	Fort Worth	
51. Keith, Joseph M.	A	Fort Worth	
52. Morris, A. J.	N	Fort Worth	
53. Steger, Joseph H.	A	Fort Worth	
Taylor-Jones Counties			
12. Bailey, Stanfill W.	A	Abilene	
13. Johnson, Dale F.	A	Abilene	
14. McFadden, Candour A.	A	Abilene	
15. Pryor, George E., Jr.	A	Stamford	
Tom Green-Coke-Crockett-Concho-Irion-Sterling-Sutton-Schleicher Counties			
6. Brown, Brian T.	A	San Angelo	
7. Smith, William L.	A	Sonora	
8. Williamson, Thomas J.	A	Eldorado	
Travis County			
20. Brady, Jesse J.	N	Austin	
21. Bratton, Robert E.	N	Austin	
22. Harris, Woodson W.		Austin[3]	
Victoria-Calhoun-Goliad Counties			
2. Fry, E. P.	A	Victoria[4]	
Walker-Madison-Trinity Counties			
4. Bush, Leonard E.		Huntsville	
5. Cole, Thomas C.	N	Huntsville	
6. James, J. A.	A	Normangee	
Washington County			
1. Cooper, Albert L	A	Chapel Hill	
Webb-Zapata-Jim Hogg Counties			
5. Howard, Glenn T.	A	Bruni	
6. Puig, Valentine L., Jr.	N	Laredo	
Wharton-Jackson-Matagorda-Fort Bend Counties			
3. Johnson, Leonard	A	El Campo	
4. Outlar, Leonard B.	N	Wharton	
Wichita County			
10. McConchie, Richard D.	A	Wichita Falls	
Williamson County			
4. Jopling, Julian L.	A	Taylor	
Young-Jack-Archer Counties			
4. Lovett, James P.	N	Olney	

[1]Formerly of Jersey City, N. J.

[1]Formerly of Graham.
[2]Formerly of Franklin.
[3]Formerly of Temple.
[4]Formerly of Frederick, Okla.

FEEDING STOMACH ULCER PATIENTS AT NIGHT

Patients with ulcer of the stomach need to be fed at night to neutralize the acid present which retards healing, according to a report in the February 2 issue of *The Journal of the American Medical Association.*

David J. Sandweiss, M. D., from Detroit, Major Marcus H. Sugarman and Captain Harold M. Podolsky, of the Medical Corps, Army of the United States, and M. H. F. Friedman, Ph. D., of Philadelphia, studied gastric secretion in 38 normal persons and 29 ulcer patients at the Harper Hospital and the North End Community Fund Clinic, Detroit, Mich.

The authors conclude that although the ulcer patients have no greater volume of gastric juice at night than normal persons, the evidence indicates that they retain more of the juice and acid in their stomachs. Therefore, in order to prevent the acid from irritating the ulcer at night, feeding is essential.

HOSPITALS NEEDING INTERNS AND RESIDENTS

Methodist Hospital, Dallas. Capacity 206 beds. C. B. Fielder, Superintendent; (4 interns now).

Brackenridge Hospital, Austin. Capacity 225 beds. J. M. Coleman, M. D., Medical Director; (2 interns, July 1).

All Saints Episcopal Hospital, Fort Worth. Capacity 110 beds. Eva M. Wallace, R. N., Superintendent. Approved general residency; (2 residents on or before April 1).

1945 MORTALITY OF PHYSICIANS UP

Death claimed approximately 4,015 physicians during 1945 as compared with 3,415 the previous year, according to the January 19 issue of *The Journal of the American Medical Association.*

TEXAS HOSPITAL ASSOCIATION MEETING

The Texas Hospital Association will hold its annual meeting in Fort Worth, March 21, 22, and 23, advises Miss Madelyne Sturdavant, Dallas, Executive Secretary.

Mr. Lawrence Payne, Administrator, Baylor University Hospital, Dallas, President of the Association, extends a cordial invitation to any member of the State Medical Association who would like to attend this meeting.

Registration and exhibits will be housed on the fourteenth floor of the Hotel Texas. Meeting concurrently with the Hospital Association are associations of anesthetists, occupational therapists, medical record librarians, and their women's auxiliaries. A joint meeting of the Association with all of these groups will be held at 1:00 P. M., March 21, in the Ball Room, fourteenth floor of the Hotel Texas, for a one hour opening assembly. Everett W. Jones, Chicago, vice-president of the Modern Hospital Publishing Company, will be the featured speaker at this meeting. Mr. Jones will talk on "Personnel and Public Relations."

Other addresses that may be of particular interest to physicians are "National Legislation Affecting Hospitals," which will be discussed by George Bugbee, executive director of the American Hospital Association, at an evening session, March 21; a discussion of the survey of Texas hospitals and health facilities which will be led by Mrs. Josie M. Roberts, Houston, chairman of the advisory council to the State Board of Health, in connection with the survey, and by Mr. Norman Roberts, who has been employed by the State Board of Health to conduct the survey, which discussion will be carried out in the afternoon of March 22; and the report on progress of Group Hospital Service and the new medical and surgical plan, with developments in that field by W. R. McBee, plan administrator, and E. M. Collier, chairman of the council on hospital service plans, also in the afternoon session of March 22.

Dr. R. B. Anderson, Fort Worth, chairman of the public relations committee of the State Medical Association, will discuss the public relations program of that organization; and Philip Overton, Austin, counsel for the Hospital Association, will discuss the legislative program of the Association in the morning session, March 22.

While the program has been carefully planned to cover all features and problems of hospital administration, many features of the meeting will be of interest to physicians.

TEXAS SOCIETY OF PATHOLOGISTS

Texas Society of Pathologists met in Dallas January 27, electing the following officers: Dr. May Owen, Fort Worth, president; Dr. D. A. Todd, San Antonio, president-elect; Dr. Sidney W. Bohls, Austin, vice-president; Dr. C. T. Ashworth, Dallas, secretary-treasurer; and Dr. A. J. Gill, Dallas, assistant secretary-treasurer. It was decided to meet at Galveston in May in connection with the meeting of the State Medical Association.

During the afternoon, Dr. Paul Brindley, Galveston, led a seminar on tumors.

TEXAS SOCIETY OF MEDICAL TECHNOLOGISTS

An invitation has been extended Texas physicians and their technicians to attend a meeting of the Texas Society of Medical Technologists, April 12 and 13 at the Plaza Hotel in San Antonio, by the society's president-elect and acting president, Mr. Paul Lea, M. T., of Lubbock. The program will feature discussion of new laboratory methods and procedures concerned with intestinal parasites, gonococci, effects of penicillin on bacteria, complement and precipitation tests, the Rh factor, Weil's disease, acidosis and alkalosis, spinal fluid, tropical diseases, salmonella, and abnormal cells in blood smears. Nontechnical problems of medical technology, education and science, and evaluation and standardization of laboratories will also be considered. There will be a luncheon each day and dinner the first evening, in addition to a business session prior to adjournment.

Among participants on the program will be staff members of the State Health Department, Fort Sam Houston laboratories, Baylor University, University of Texas, and other Texas hospitals and laboratories, including the president of the American Society of Medical Technologists, Miss Rose Matthaei, M. T., of Houston.

TEXAS RADIOLOGICAL SOCIETY

The thirty-third annual meeting of the Texas Radiological Society was held in the Baker Hotel, Dallas, January 14. The following scientific program was presented.

True Pericardial Diverticulum—Dr. Morton L. Mazer, Dallas.
Discussion—Drs. H. E. Nelson, Dallas, and P. E. Wigby, Houston.

Diagnosis and Differential Diagnosis of the Phrenic Ampulla, the Congenitally Short Esophagus with Partial Thoracic Stomach and Hernia of the Esophageal Hiatus—Dr. R. P. O'Bannon, Fort Worth.
Discussion—Drs. J. B. Johnson, Galveston; G. D. Carlson, Dallas; L. M. Garrett, Corpus Christi; and Dalton Richardson, Austin.

Lesions of the Skin Seen in Radiological Practice—J. R. Maxfield, Dallas.
Discussion—Dr. L. M. Garrett, Corpus Christi.

Films for Discussion and Diagnosis—Drs. Herman Klapproth, Sherman; T. W. Martin, Port Arthur; Dalton Richardson, Austin; H. E. Whigham, McAllen; A. P. Overgaard, Houston; and C. L. Martin, Dallas.

Lesions of the Larynx—Dr. L. M. Sellers, Dallas.
Discussions—Drs. C. L. Martin, Dallas, and R. D. Moreton, Temple.

Radium Protection During Use and Storage—Dr. Dean Cowie, Washington, D. C.

Carcinoma of the Fundus of the Uterus—Dr. C. L. Martin, Dallas.
Discussion—Ozro T. Woods, Dallas.

Dr. Dean Cowie, of Washington, D. C., the honor guest of the Society, gave an address on radioactive isotopes in medical research at the annual banquet in the Crystal Ballroom of the Baker Hotel.

Drs. James M. Martin, Dallas; B. T. Vanzant, Houston; G. E. Henschen, Sherman; and S. S. Muner, Marlin, were elected to honorary membership. New members included Drs. Jack G. S. Maxfield, Dallas; Everett E. Seedorf, Temple; D. L. Sprinkle, Harlingen; Royal F. Wertb, Amarillo; and Frank M. Windrow, Dallas.

The Society officially condemned U. S. Senate Bill 1318, the so-called Pepper Bill, for the extension of the maternity and infant care program, and instructed the secretary to inform the Senators and Representatives of Texas of this action.

New officers were elected as follows: Drs. Herman Klapproth, Sherman, president; C. A. Steven-

son, Temple, president-elect; L. M. Garrett, Corpus Christi, first vice-president; J. J. Faust, Fort Worth, second vice-president; R. P. O'Bannon, Fort Worth, secretary-treasurer; and R. T. Wilson, Austin, historian.

It was decided to hold the next meeting in January, 1947, the exact date and place to be set later.

AMERICAN COLLEGE OF PHYSICIANS COURSE IN GENERAL MEDICINE AT UNIVERSITY OF TEXAS

The American College of Physicians is sponsoring a series of postgraduate courses at institutions throughout the country, one of which will be held at the University of Texas School of Medicine, Galveston. The Texas course will be a review in general medicine from March 25 to 30, under the direction of Dr. Charles T. Stone, professor of medicine.

Minimal registration for the course will be 25; maximal, 50. Designed especially for fellows and associates of the College, the course will also be open to nonmembers with adequate preliminary training if facilities are available. Preference to nonmembers will be given in the following order: candidates for membership in the College, medical officers in the Armed Forces, physicians preparing for examination by their certifying boards, and other nonmembers having adequate background for advanced work. Fees will be $20 to members of the College; $40 to nonmembers; and no charge to medical officers on active duty or terminal leave. One-half the registration fee is payable at the time of filing an application, the balance to be paid not later than three weeks in advance of the opening of the course. Registrations should be filed directly with the Educational Director of the College, 4200 Pine Street, Philadelphia 4, Pa.

Guest instructors for the course in Galveston have been announced as follows: Dr. J. H. Black, Professor of Clinical Medicine, Southwestern Medical College, Dallas; Dr. James A. Greene, Professor of Medicine, Baylor University College of Medicine, Houston; Dr. Tinsley Harrison, Dean and Professor of Medicine, Southwestern Medical College, Dallas; Dr. Carl V. Moore, Associate Professor of Medicine, Washington University, St. Louis; Dr. Paul T. Petit, Beaumont; Dr. Homer E. Prince, Associate Professor of Medicine, Baylor University College of Medicine, Houston; Dr. Wesley W. Spink, Associate Professor of Medicine, University of Minnesota, Minneapolis; and Dr. Henry M. Winans, Professor of Clinical Medicine and Professor of History of Medicine, Southwestern Medical College, Dallas.

Members of the faculty at the University of Texas who will participate include Dr. Paul Brindley, Professor of Pathology; Dr. George M. Decherd, Associate Professor of Medicine; Dr. Jack R. Ewalt, Professor of Neuropsychiatry; Dr. Chester N. Frazier, Professor of Dermatology and Syphilology; Dr. Wendell D. Ginrich, Associate Professor of Bacteriology; Dr. Raymond L. Gregory, Professor of Medicine; Dr. Arild E. Hansen, Professor of Pediatrics; Dr. Titus H. Harris, Professor of Neurology and Psychiatry; Dr. George R. Herrmann, Professor of Medicine; Dr. Jules K. Lamar, Assistant Professor of Obstetrics and Gynecology; Dr. Chauncey D. Leake, Vice-President and Dean and Professor of Pharmacology; Dr. Edward J. Lefeber, Assistant Professor of Medicine; Dr. William G. Levin, Assistant Professor of Medicine; Dr. Arthur Ruskin, Assistant Professor of Medicine; Dr. Edward H. Schwab, Associate Professor of Medicine; Dr. Charles T. Stone, Professor of Medicine; and Dr. Stephen Weisz, Associate Professor of Neuropsychiatry and Neuropathologist.

Instruction will utilize clinical cases, symposia, clinico-pathological conferences, and didactic lectures. Some of the subjects which will be considered are hemolytic streptococcic disease, subacute bacterial endocarditis, recent advances in chemotherapy, diagnosis and treatment of the diarrheas, staphylococcic diseases, malaria, chronic ulcerative colitis, brucellosis, hepatitis, nutritional aspects of anemias, hematological dycrasias, gout, diabetes mellitus, the use of thiouracil in hyperthyroidism, rheumatic fever, coronary arteriosclerosis, coronary occlusion, and the various allergies. The subjects referred to only highlight the whole intensive course.

FORT SAM HOUSTON MEDICAL CENTER

A move involving approximately 6,000 enlisted men and officers will be completed by March 15, when medical activities of Carlisle Barracks, Pa., and the medical section and certain portions of the basic training program at the Army Service Forces Training Center, Fort Lewis, Wash., will be transferred to Fort Sam Houston, Texas, Major General Norman T. Kirk, Surgeon General of the Army, has announced.

The concentration of the Medical Department schools and courses at this new center will represent a saving in the transportation of trainees from one school to another in many cases and also will result in more economical and effective operation of the training program, according to Col. Floyd L. Wergeland, Director of the Education and Training Division of The Surgeon General's Office.

Plans are being made for five battalions which will train about 5,000 men in basic and technical courses at Fort Sam Houston, and a basic Medical Department officers' course of approximately 1,100 newly-commissioned officers will be in continuous operation, Colonel Wergeland said.

The basic training will require six weeks and the basic technicians course will take another seven weeks, making a total of thirteen weeks. The technician schools include courses of eight to sixteen weeks for dental, laboratory, x-ray, surgical, and medical technicians. There will be common specialist courses for cooks and bakers, chauffeurs, clerks, auto mechanics, and sanitary technicians.

There will be a School of Military Neuropsychiatry and a School of Roentgenology and Medical Equipment Maintenance Technician courses. Residency type training for Medical Corps officers will be carried on at Brooke General Hospital and also at nine other general hospitals in this country, as part of The Surgeon General's plan to provide greater opportunities for professional advancement to the members of the Army Medical Corps.

The scope of the curriculum indicates that through the training available at this center, it will be possible to take the recruits who come there and train them so that they will be qualified to perform all the duties necessary for the maintenance of a medical unit in the field, even to the point of keeping automobiles in repair and baking the bread.

War Department plans call for the continuation of Carlisle Barracks as an Army post and as the location for the Army Information School.—S. G. O. Notes, Jan 31, 1946.

ART EXHIBIT ON ARMY MEDICINE

The wartime record of how Army physicians, nurses, and medical corpsmen sped to recovery nearly 97 out of every 100 American soldiers who lived to reach hospitals is graphically told in an exhibit to be displayed at the Dallas Museum of Fine Arts, from March 3 until March 31. The exhibit includes the finest of well over 200 oils, water color, and drawings in the Abbott Army Medicine Collection.

The paintings, which were two and a half years in the making, are the work of twelve foremost American artists, many of whom risked their lives voluntarily and repeatedly to depict battle action in

India, Burma, China, the Pacific theaters of war, North Africa, Italy, England, Belgium, and France. To make the story of Army medicine complete, other artists painted in training camps, in hospitals, on hospital trains and ships, and in the mills and factories of the drug and surgical industries. Their work comprehensively portrays the training of Army physicians, nurses, and enlisted personnel, research, production of medical supplies, aviation medicine, hospitalization, and rehabilitation.

McCLOSKEY HOSPITAL CLOSES

McCloskey General Hospital, Temple, is among fourteen Army general hospitals, three annexes to general hospitals, and four convalescent hospitals scheduled to be closed by March 31, according to Major General Norman T. Kirk, Surgeon General of the Army. In accordance with the Surgeon General's policy of releasing hospitals as rapidly as the decrease in the patient load justifies, the units will be offered to the Veterans Administration or reported to the Surplus Property Administration for disposal, but there will be a lapse of sixty days between the dates on which the hospitals will be closed and the dates on which they will be declared surplus to the needs of the War Department in order to allow time for handling administrative details.

Out of a wartime peak of 65 general hospitals operated by the Army, 20 have already been closed. In addition, out of 13 convalescent hospitals, 3 have already been closed. The peak patient load in Army hospitals in the United States was reached in August, 1945, with a total census of 315,000. There were approximately 121,400 patients in Army general and convalescent hospitals at the first of this year, and it is estimated that there will be approximately 39,700 on June 1.—S. G. O. Notes, Jan. 1, 1946.

AMERICAN PUBLIC HEALTH ASSOCIATION MEETING

The Executive Board of the American Public Health Association has announced the Seventy-fourth Annual Meeting of the Association to be held in Cleveland, Ohio, the week of November 11, 1946.

This will be the first full-scale convention of the association since 1942. In 1943 and 1944, streamlined wartime congresses on public health were held, and in 1945, for the first time in its history, the organization held no annual meeting

An attendance of 4,000 is anticipated, representing every state in the United States, Canada, South America, and many other countries outside this hemisphere. Dr. Harold J. Knapp, Cleveland's Health Commissioner, has been appointed chairman of the local committee.

AMERICAN BOARD OF OPHTHALMOLOGY

The American Board of Ophthalmology expects to take a liberal attitude toward the substitution of a preceptorship for residency in an ophthalmic hospital in fulfilling requirements for its examination during the present over-crowding of facilities, accord to a communication from Dr. S. Judd Beach, secretary of the board. A preceptorship has always been accepted in favorable cases, although neither a preceptorship nor a residency suffices in itself to meet the requirements of the board, each candidate being judged on his merits in determining fitness for examination.

The board recommends that in entering upon preceptorship certain conditions be kept in mind: The student will profit most after a sound course in the basic sciences of physiology of the eye and of vision, optics, pathology, bacteriology, chemistry, pharmacology, the relation of the eye to general disease, anatomy, embryology, and neurology. Men have been accepted from preceptors not diplomates of the board, but of course the board has more information about those teachers who have passed its examinations. Any preceptor should understand that he is assuming a responsibility in taking a student and is not merely obtaining help in the drudgery of his office. He should be willing to give time to clinical training and the use of apparatus, slit-lamp, ophthalmoscope, tonometer, and to directing the student's practice in surgery, on animal eyes, assisting in operations, and ultimately in performing them.

To cover the same amount of ground takes longer in a preceptorship than in a residency, the board points out, suggesting that students accept opportunities to take hospital positions of all sorts as they become available.

FOUNDATION PRIZE

The American Association of Obstetricians, Gynecologists, and Abdominal Surgeons has announced that its "Foundation Prize" will be awarded again this year. The prize of $150 will be given for a manuscript written by an intern, resident, or graduate student in obstetrics, gynecology, or abdominal surgery, or a doctor of medicine actively practicing or teaching obstetrics, gynecology, or abdonimal surgery. Three copies of each manuscript must be in the hands of the secretary before June 1. Manuscripts are limited to 5,000 words and must be typewritten in double-spacing on one side of the sheet, with as few illustrations as consistent with a clear exposition of the thesis.

Each contestant must present his manuscript under a nom-de-plume, together with a sealed envelope bearing the nom-de-plume and containing a card showing the name and address of the contestant.

The successful thesis will become the property of the Association, but this provision will in no way interfere with publication of the communication in a journal of the author's choice. Unsuccessful contributions will be returned promptly to their authors.

The award will be made at the annual meeting of the Association, at which time the successful contestant must appear in person to present his contribution as a part of the scientific program. The contestant will be expected to meet all expenses incident to this presentation.

Manuscripts should be sent to Dr. James R. Bloss, Secretary, 418 Eleventh Street, Huntington, W. Va.

AMERICAN ASSOCIATION FOR THE STUDY OF GOITER

The American Association for the Study of Goiter will meet at the Drake Hotel in Chicago on June 20-22 for the first time since 1941. The Program Committee is planning a full and interesting program with special features, such as a paper on radioactive isotopes in relation to the investigation and treatment of thyroid disease. There will also be papers discussing the use and danger of thiouracil in toxic goiter and on many other phases of thyroid disease. Those who desire to read a paper are requested to send the title at once to the Chairman of the Program Committee, Dr. S. F. Haines, Mayo Clinic, Rochester, Minn.

Another feature of the Chicago meeting will be the presentation of the Van Meter Prize Award for original work on problems related to the thyroid gland.

Attention has been called by the Corresponding Secretary of the Association, Dr. T. C. Davidson, to the possibility that some members may be eligible for senior membership, having been active members for fifteen years or having reached the age of sixty, and might wish to request that they be given that type of membership, which offers all the rights of

active membership without the payment of dues, thereby making room for more young men who are eager for membership. The active membership is limited to 150. Correspondence relating to new members should be directed to the Recording Secretary, Dr. George C. Shivers, Colorado Springs, Colo.

NATIONAL ARTHRITIS RESEARCH FOUNDATION

Plans to establish a national foundation to combat arthritis were announced February 10 in Chicago. Louis Kranitz, St. Joseph, Mo., chairman of the national campaign committee, said that $2,500,000 is the goal being sought for establishment of the National Arthritis Research Foundation, with its main buildings to be located in Hot Springs National Park, Ark.

The Foundation, a national and independent center for studying the causes and treatment of rheumatic diseases, is an outgrowth of plans originally made by the Leo N. Levi Memorial Hospital of Hot Springs, a nonsectarian institution devoted to the free care of arthritic victims, to develop a research wing. Medical authorities suggested that the hospital abandon its project in favor of a national foundation.

Complete control of research under the new Foundation will be in the hands of a medical advisory board made up of outstanding specialists from throughout the country.

A. M. A. PREPAYMENT MEDICAL CARE PLAN AND NATIONAL HEALTH PROGRAM*

The Board of Trustees of the American Medical Association and the Council on Medical Service of the American Medical Association at a meeting just completed in Chicago have taken a long step toward protection of the American people against the costs of sickness through participation in a voluntary prepayment sickness plan now developed under the authority of the American Medical Association.

The fundamental step in the development of this plan was the establishment of standards of acceptance for medical care plans which have the approval of the Council on Medical Service of the American Medical Association. Any plan which meets the standards of the Council will be entitled to display the seal of acceptance of the American Medical Association on its policies and on all of its announcements and promotional material. In order to qualify for acceptance, the prepayment plan must have the approval of the state or county medical society in the area in which it operates. The medical profession in the area must assume responsibility for the medical services included in the benefits. Plans must provide free choice of a qualified doctor of medicine and maintain the personal, confidential relationship between patient and physician. The plans must be organized and operated to provide the greatest possible benefits in medical care to the subscriber.

Medical care plans may be in terms of either cash indemnity or service units, with the understanding that benefits paid in cash are to be used to assist in paying the costs incurred for medical service. The standards also include provisions relative to the actuarial data that are required, systems of accounting, supervision by appropriate state authorities and periodic checking and reporting of the progress of the plan to the Council.

Coincidentally with the announcement of these standards of acceptance, there was organized, as a voluntary federation, an organization known as Associated Medical Care Plans, Inc. This independent association will include as members all plans that meet the minimum standard of the Council on Medical Service of the American Medical Association. The Associated Medical Care Plans will undertake to establish coordination and reciprocity among all of these plans so as to permit transference of subscribers from one plan to another and use of the benefits in any state in which a subscriber happens to be located. Under this method great industrial organizations with plants in various portions of the United States will be able to secure coverage for all of their employees. Moreover, it will be possible for the Veterans Administration, welfare and industrial groups as well as government agencies, to provide coverage for the people in any given area through a system of national enrollment. In addition, the Associated Medical Care Plans, Inc., will undertake research and the compilation of statistics on medical care, provide consultation and information services based on the records of existing plans and engage in a great campaign of public education as to the medical service plan movement under the auspices of state and county medical societies.

The Board of Trustees of the American Medical Association also announced the establishment under its Council on Medical Service of a Division of Prepayment Medical Care Plans with a director and a staff who will administer the activities of the Council on Medical Service related to the promotion and development of medical care plans in all of the states.

In announcing its proposals for a nation-wide provision of sickness insurance on a mutual nonprofit basis, the Association through its President and the Board of Trustees authorizes the publication of its complete health program with the ten points, which include the development of services in the field of preventive medicine, maternal and child health, voluntary prepayment plans for protection against the costs of sickness, compensation for loss of wages due to illness, the care of the veteran and the development of a high standard of housing, nutrition, clothing and recreation. The American Medical Association last June through its Board of Trustees and Council on Medical Service announced a 14-point program to improve the health and medical care situation in the United States. In October, 1945, the interpretation of these 14 points and methods of implementation were adopted by the Council on Medical Service. In December, 1945, the House of Delegates approved the whole program, suggested its rearrangement and directed the Board of Trustees to keep the program constantly up to date so that it will stay at least even with and, if possible, a step ahead of the needs of the public.

With this in mind the Board of Trustees has adopted a restatement of the 14-point program, which clarifies still further the position of the American Medical Association on some of these points and brings into the program more definitely such matters as maternal and child welfare, medical research, the medical care of the veteran and the part to be played by the voluntary health agencies.

This restatement follows:

National Health Program of the American Medical Association

1. The American Medical Association urges a minimum standard of nutrition, housing, clothing and recreation as fundamental to good health and as an objective to be achieved in any suitable health program. The responsibility for attainment of this standard should be placed as far as possible on the individual, but the application of community effort, compatible with the maintenance of free enterprise, should be encouraged with governmental aid where needed.

*Released by the Board of Trustees of the American Medical Association to radio stations and newspapers, Feb. 16 and 17, 1946.

2. The provision of preventive medical services through professionally competent health departments with sufficient staff and equipment to meet community needs is recognized as essential in a health program. The principle of federal aid through provision of funds or personnel is recognized with the understanding that local areas shall control their own agencies as has been established in the field of education. Health departments should not assume the care of the sick as a function since administration of medical care under such auspices tends to a deterioration in the quality of the service rendered. Medical care to those unable to provide for themselves is best administered by local and private agencies with the aid of public funds when needed. This program for national health should include the administration of medical care including hospitalization to all those needing it but unable to pay, such medical care to be provided preferably by a physician of the patient's choice with funds provided by local agencies with the assistance of federal funds when necessary.

3. The procedures established by modern medicine for advice to the prospective mother and for adequate care in childbirth should be made available to all at a price that they can afford to pay. When local funds are lacking for the care of those unable to pay, federal aid should be supplied with the funds administered through local or state agencies.

4. The child should have throughout infancy proper attention including scientific nutrition, immunization against preventable disease and other services included in infant welfare. Such services are best supplied by personal contact between the mother and the individual physician but may be provided through child care and infant welfare stations administered under local auspices with support by tax funds whenever the need can be shown.

5. The provision of health and diagnostic centers and hospitals necessary to community needs is an essential of good medical care. Such facilities are preferably supplied by local agencies, including the community, church and trade agencies which have been responsible for the fine development of facilities for medical care in most American communities up to this time. Where such facilities are unavailable and cannot be supplied through local or state agencies, the federal government may aid, preferably under a plan which requires that the need be shown and that the community prove its ability to maintain such institutions once they are established. (Hill-Burton bill.)

6. A program for medical care within the American system of individual initiative and freedom of enterprise includes the establishment of voluntary nonprofit prepayment plans for the costs of hospitalization (such as the Blue Cross plans) and voluntary nonprofit prepayment plans for medical care (such as those developed by many state and county medical societies). The principles of such insurance contracts should be acceptable to the Council on Medical Service of the American Medical Association and to the authoritative bodies of state medical associations. The evolution of voluntary prepayment insurance against the costs of sickness admits, also, the utilization of private sickness insurance plans which comply with state regulatory statutes and meet the standards of the Council on Medical Service of the American Medical Association.

7. A program for national health should include the administration of medical care, including hospitalization, to all veterans, such medical care to be provided preferably by a physician of the veteran's choice with payment by the Veterans Administration through a plan mutually agreed on between the state medical association and the Veterans Administration.

8. Research for the advancement of medical science is fundamental in any national health program. The inclusion of medical research in a National Science Foundation, such as proposed in pending federal legislation, is endorsed.

9. The services rendered by volunteer philanthropic health agencies such as the American Cancer Society, the National Tuberculosis Association, the National Foundation for Infantile Paralysis, Inc., and by philanthropic agencies such as the Commonwealth Fund and the Rockefeller Foundation, and similar bodies have been of vast benefit to the American people and are a natural outgrowth of the system of free enterprise and democracy that prevail in the United States. Their participation in a national health program should be encouraged and the growth of such agencies when properly administered should be commended.

10. Fundamental to the promotion of the public health and alleviation of illness are widespread education in the field of health and the widest possible dissemination of information regarding the prevention of disease and its treatment by authoritative agencies. Health education should be considered a necessary function of all departments of public health, medical associations and school authorities.

A. M. A. COUNCIL REPORTS

COUNCIL ON PHARMACY AND CHEMISTRY

NEW AND NONOFFICIAL REMEDIES

The following additional articles have been accepted as conforming to the rules of the Council on Pharmacy and Chemistry of the American Medical Association for admission to New and Nonofficial Remedies. A copy of the rules on which the Council bases its action will be sent on application.

AUSTIN SMITH, M. D., *Secretary.*

Bacterial Vaccine Made From Hemophilus Pertussis.—Pertussis vaccine.—Whooping cough vaccine. A sterile suspension of killed pertussis bacilli (Hemophilus pertussis) of one or more strains showing the characteristics of phase I as described by Leslie and Gardner. This suspension is contained in isotonic solution of sodium chloride or other suitable diluent. The vaccine may be dispensed as a simple suspension, commonly known as "plain vaccine," or as an alum precipitated or aluminum hydroxide absorbed suspension. The vaccine shall contain in each cubic centimeter not less than 10 billion organisms. The vaccine may be dispensed by itself or in combination with one or more other antigens, provided the combination does not lessen the antigenic value of the pertussis vaccine or otherwise make the product unsuitable for human use.

Action and Uses.—Well controlled field studies indicate that pertussis vaccine possesses sufficient antigenic value to afford considerable protective value against whooping cough. The effect in lowering the death rate is even more striking than its effect in preventing an attack of the disease, since cases do occur in spite of the previous injection of vaccine, but such cases are usually less severe.

Dosage.—The most satisfactory dose has not been established adequately. In general, the vaccine when used as a plain vaccine should contain not less than 15 billion organisms per individual injection, with the total dose representing at least 45 billion, preferably much more. When used as precipitated vaccine the individual injection should contain not less than 10 billion organisms, with a total dose of 30 billion or more organisms. Pending more complete knowledge it is suggested that the user be guided by the dosage recommendation given on the

manufacturer's product, since this represents the dosage accepted by the investigators whose methods have been used in preparing the vaccine.

CUTTER LABORATORIES, BERKELEY, CALIF.

Pertussis Vaccine Phase I Concentrate: 5 cc., 20 cc. and 50 cc. vials. H. pertussis 20,000 million per cubic centimeter. Preserved with phenol 0.25 per cent and merthiolate 0.002 to 0.005 per cent.

THE NATIONAL DRUG COMPANY, PHILADELPHIA

Pertussis Vaccine (Double Strength): 6 cc. vial (one immunization), 12 cc. vial (two immunizations) and 25 cc. vial (four immunizations). H. pertussis 20,000 million per cubic centimeter. Preserved with merthiolate 1:10,000.

SHARP & DOHME, INC., GLENOLDEN, PA.

Pertussis Bacterin "H" Strength: 5 cc. and 20 cc. vials. 20,000 million H. pertussis per cubic centimeter. Preserved with phenol 0.5 per cent.

THE UPJOHN COMPANY, KALAMAZOO, MICH.

Pertussis Vaccine (Single Strength): 24 cc. vials. 20,000 million H. pertussis per cubic centimeter. Preserved with phenol 0.5 per cent.

Pertussis Vaccine (Double Strength): 5 cc. and 20 cc. vials. 20,000 million H. pertussis per cubic centimeter. Preserved with phenol 0.5 per cent.

Pertussis Vaccine Alum Precipitated.—A bacterial vaccine prepared from alum precipitated, killed H. pertussis.

Actions and Uses.—Same as Bacterial Vaccine made from H. pertussis.

Dosage.—Three 1 cc. subcutaneous injections of 10,000 million or 15,000 million H. pertussis at three to four week intervals.

THE NATIONAL DRUG COMPANY, PHILADELPHIA

Pertussis Vaccine (Alum Precipitated): 3 cc. vial (one immunization) and 10 cc. vial (three immunizations). 10,000 million H. pertussis per cubic centimeter. Preserved with merthiolate 1:10,000.

Pertussis Vaccine Combined with Diphtheria Toxoid.—A combination of pertussis vaccine with diphtheria toxoid.

Actions and Uses.—Employed in the simultaneous immunization of susceptible persons against diphtheria and whooping cough.

Dosage.—Three doses of 1 cc. at three to four week intervals.

THE NATIONAL DRUG COMPANY, PHILADELPHIA

Diphtheria-Pertussis Combined Vaccine (Alum Precipitated): Three 1 cc. vials (one immunization) and three 5 cc. vials (five immunizations). 10,000 million H. pertussis, 0.5 cc. diphtheria toxoid immunizing dose. Preserved with merthiolate 1:10,000.

SHARP & DOHME, INC., GLENOLDEN, PA.

Diphtheria-Pertussis Antigens Combined (Alum Precipitated): 10 cc. vials (three dose immunization). 10,000 million H. pertussis diphtheria toxoid immunizing dose. Preserved with phenol 1:50,000.

Pertussis Vaccine Combined with Diphtheria and Tetanus Toxoids.—A combination of pertussis vaccine with diphtheria toxoid and tetanus toxoids.

Actions and Uses.—Employed in the simultaneous immunization of susceptible persons against whooping cough and diphtheria.

Dosage.—Three subcutaneous injections of 1 cc. at three to four week intervals.

THE NATIONAL DRUG COMPANY, PHILADELPHIA

Diphtheria-Tetanus-Pertussis Combined Vaccine (Alum Precipitated): Three 1 cc. vials (one immunization) and three 5 cc. vials (five immunizations). 10,000 million H. pertussis, diphtheria toxoid and tetanus toxoid 0.33 cc. each per cubic centimeter. Preserved with merthiolate 1:10,000.

Contraceptive Jellies and Creams (See New and Nonofficial Remedies, 1945, p. 355).

The following article has now been accepted:

EATON LABORATORIES, INC., NORWICH, N. Y.

Lorophyn Jelly: A water soluble jelly formed from tragacanth and purified Irish moss, having a *pH* of 7.5, prepared from the formula:

	Per Cent
Phenylmercuric acetate	0.05
Polyethylene glycol of mono iso octyl phenyl ether	0.3
Gum tragacanth	1.8
Purified Irish moss	2.0
Glycerin	8.0
Methyl p-hydroxy benzoate	0.05
Sodium borate U. S. P.	3.0
Water	84.8

Actions and Uses.—See article Contraceptive Jellies and Creams.

Dosage.—5 cc.

Syringe Applicators for Contraceptive Jellies and Creams (See New and Nonofficial Remedies, 1945, p. 357).

The following article has now been accepted:

EATON LABORATORIES, INC., NORWICH, N. Y.

Lorophyn Jelly Applicator: A transparent plastic syringe threaded at the blunt, intravaginal end, to screw onto the tubes of jelly, to permit filling by compression of the tube. The full capacity is 5 cc., the recommended dose.

Hexavitamin (See *J. A. M. A.*, Aug. 11, 1945, p. 1,099).

The following dosage form has been accepted:

THE WM. S. MERRELL CO., CINCINNATI

Tablets Hexavitamin: Each tablet contains 2,500 U. S. P. units of vitamin A, 200 U. S. P. units of vitamin D, 1 mg. of thiamine hydrochloride, 1.5 mg. of riboflavin, 37 mg. of ascorbic acid and 10 mg. of nicotinamide.

Diethylstilbestrol (See New and Nonofficial Remedies, 1945, p. 428).

The following dosage forms have been accepted:

BRISTOL LABORATORIES, SYRACUSE, N. Y.

Diethylstilbestrol (in Sesame Oil): 0.2 mg. per cc.; 0.5 mg. per cc.; 1.0 mg. per cc.; 2.0 mg. per cc. and 5.0 mg. per cc.: 1 cc. ampuls and 30 cc. vials. Preserved with 0.005 Gm. chlorobutanol.

—J. A. M. A., Jan. 5, 1946.

Contraceptive Jellies and Creams (See New and Nonofficial Remedies, 1945, p. 355).

The following articles have been accepted:

DUREX PRODUCTS, INC., NEW YORK

Lactikol Creme: A water dispersible nonfatty stearic acid and glyceryl monostearate cream, having a *pH* of 4.9, prepared from the formula:

	Per Cent
Stearic acid	15.00
Glyceryl monostearate	7.50
Glycerin	8.00
Glyceryl monoricinoleate	1.50
Sodium lauryl sulfate	0.50
Lactic acid	0.50
Perfume	0.07
Water sufficient to make	100.00

Actions and Uses.—(See article Contraceptive Jellies and Creams.)

Dosage.—5 cc.

Lactikol Jelly: A water soluble jelly formed from tragacanth, karaya and acacia, having a *pH* of 4.15, prepared from the formula:

	Per Cent
Tragacanth	2.70
Karaya	1.00
Acacia	1.00
Lactic acid	1.50
Glycerin	16.00
Glyceryl monoricinoleate	1.00
Sodium lauryl sulfate	0.20
Butyl ester of parahydroxy benzoic acid	0.02
Oxyquinolin sulfate	0.05
Perfume	0.04
Water sufficient to make	100.00

Actions and Uses.—(See article Contraceptive Jellies and Creams.)

Dosage.—5 cc.

Syringe Applicators for Contraceptive Jellies and Creams (See New and Nonofficial Remedies, 1945, p. 357).

The following articles have been accepted:

DUREX PRODUCTS, INC., NEW YORK

Lactikol Plunger Applicator: A transparent plastic tube threaded at the blunt intravaginal end to screw onto the tubes of Lactikol Creme and Jelly to permit filling by compression of the tube. The full capacity is 5 cc., the recommended dose.

Lactikol Metri-Dose Applicator: A transparent glass tube graduated to permit delivery of from 5 to 8 cc., slightly constricted at the intravaginal end to permit filling, and fitted at the distal end with a rubber compression bulb with central wire spring device to permit adjustment of the volume of jelly or cream to be delivered.

Thiamine Hydrochloride (See New and Nonofficial Remedies, 1945, p. 610).

The following additional dosage form has been accepted:

SCHIEFFELIN & CO., NEW YORK

Tablets Thiamine Hydrochloride: 3 mg.

Ascorbic Acid (See New and Nonofficial Remedies, 1945, p. 622).

The following additional dosage form has been accepted:

SCHIEFFELIN & CO., NEW YORK

Tablets Ascorbic Acid: 100 mg.

Hexestrol (See New and Nonofficial Remedies, 1945, p. 435).

The following dosage form has been accepted:

ORTHO PRODUCTS, INC., LINDEN, N. J.

Tablets Hexestrol: 1 mg. and 3 mg.

—J. A. M. A., Jan. 26, 1946.

LIBRARY NOTES

The package library consists of collections of reprints and other periodical material on various subjects, prepared for lending to members of the Association. Requests for packages should be addressed "Library, State Medical Association of Texas, 1404 W. El Paso Street, Fort Worth, Texas." Twenty-five cents in stamps should be enclosed with the request to cover postage and part of the expense of collecting the material. Only one package may be borrowed at a time, and packages are allowed to remain in the hands of the borrower for 14 days.

PACKAGE SERVICE

Packages were mailed from the Library of the State Medical Association to the following during February:

Dr. O. F. Harzke, Comfort—*Myasthenia, gravis* (17 articles).

Dr. P. L. Allen, Weatherford—*Menstruation, disorders* (12 articles); *Appetite, disturbances* (5 articles).

Dr. L. E. Petty, Borger—*Prostigmin* (6 articles).

Dr. J. R. Dickson, Arp—*Prostigmin, therapy* (5 articles); *Chlorine, therapy* (5 articles).

Dr. J. W. Ward, Greenville—*Nose, hemorrhage* (11 articles).

Dr. D. R. Foster, Itasca—*Blood, cholesterol* (8 articles).

Dr. Howard R. Dudgeon, Jr., Waco—*Colon, dilatation* (17 articles).

Dr. Maurice E. Barrett, Decatur—*Blood, groups* (15 articles).

Mrs. J. Frank Clark, Georgetown—*Medicine in Russia* (6 articles).

Dr. J. A. Heymann, Wichita Falls—(1 journal).

Dr. H. E. Lancaster, Beeville—*Oxyuriasis* (19 articles).

Dr. R. G. Granberry, Marshall—*Blood Pressure, high* (27 articles).

Dr. C. E. Gilmore, Paris—*Myasthenia, gravis* (11 articles).

Drs. Camp and Camp, Pecos—*Breast* (7 articles).

Dr. Herbert Donnell, Waxahachie—*Physicians, relation to the public* (20 articles).

Dr. Scott E. McNeill, Beeville—*Testicles, undescended* (17 articles).

Dr. L. C. Carter, Port Arthur—*Penicillin* (4 articles).

Dr. Ernest E. Miller, Beeville—*Paralysis, spastic* (22 articles).

Dr. W. S. Rhode, Colorado City—(1 journal).

Dr. W. M. Boguskie, Hearne—*Blood, groups* (20 articles).

Dr. N. A. Elder, Nixon—*Insanity, puerperal* (7 articles).

Capt. Harry R. Mushlin, Camp Hood—*Sarcoidosis* (13 articles).

Dr. W. H. Sory, Jacksonville—(1 journal).

Dr. Roland F. Knox, Wichita Falls—*Adrenals, tumors* (9 articles).

Major Wallace W. Lindahl, Camp Fannin (2 journals).

Dr. S. Joe McKinsey, McAllen—*Endometriosis* (17 articles).

Dr. Joseph D. Landesman, Corpus Christi—*Cor Pulmonale* (11 articles).

Dr. G. V. Pazdral, Somerville—*Prostigmin* (4 articles).

Dr. Seab J. Lewis, Beaumont—(6 journals).

Dr. T. L. Lauderdale, Fort Worth—(1 journal, 1 book).

Dr. Robert Wartenberg, San Francisco, Calif.—*Reflex, plantar* (10 articles).

Dr. Robert C. Miller, Lake Jackson—*Blood, groups* (13 articles).

Dr. L. C. Heare, Port Arthur—*Economics, medical service plans* (11 articles).

Dr. J. C. Terrell, Stephenville—*Osteochondritis, deformans juvenilis* (6 articles).

Dr. A. J. Bohman, Cuero—*Gynecology, radiotherapy in* (10 articles).

Dr. Carlos A. Slaughter, Sanatorium—*Diabetes Mellitus, tuberculosis and diabetes* (11 articles).

Dr. Holloway Bush, McKinney—*Obesity, therapy* (6 articles).

Dr. William B. Cline, Woodville—*Oxygen, therapy* (5 articles).

Dr. Irving Brown, Tyler—*Meninges, hemorrhage* (14 articles).

Capt. J. B. Gibson, Whipple, Ariz.—(1 journal).

Dr. Vernon A. Black, Wharton—*Retinitis, allergic* (6 articles).

Dr. J. F. Lubben, McAllen—*Poliomyelitis* (26 articles).

Dr. W. L. Bush, Greenville—(2 journals).

Dr. Ernest E. Miller, Beeville—*Colitis, mucous* (12 articles).

Dr. E. C. Blackwell, Gorman—*Prostigmin* (4 articles).

Dr. S. F. Harrington, Dallas—*Hoarseness* (14 articles).

ACCESSIONS

Springfield, Illinois, Charles C. Thomas, Publisher—Farrell: Roentgen Diagnosis of Diseases of the Gastrointestinal Tract; Crile and Shively: Hospital Care of the Surgical Patient; Herndon: An Introduction to Essential Hypertension.

Chicago, Illinois, Year Book Publishers—Painter, editor: The 1945 Handbook of Industrial and Orthopedic Surgery.

Transactions of the American Neurological Association, 1944.

SUMMARY

REPRINTS RECEIVED, 555.	LOCAL USERS, 64.
JOURNALS RECEIVED, 206.	BORROWERS BY MAIL, 46.
ITEMS CONSULTED, 578.	PACKAGES MAILED, 48.
ITEMS TAKEN OUT, 270.	ITEMS MAILED, 478.

TOTAL ITEMS CONSULTED AND MAILED, 1,326.

MOTION PICTURE LENDING LIBRARY

Motion picture films on medical subjects, 16 mm., both silent and sound, some in color, and suitable for either medical or lay audiences, are available for loan to county medical societies, hospital staffs, or individual physicians, on request. Borrowers will be required to pay only the cost of shipment of the films, by express, with insurance, and for any damage to films while in the hands of the borrower.

Requests for films should be addressed to "Motion Picture Lending Library, State Medical Association of Texas, 1404 West El Paso Street, Fort Worth 3, Texas." A list of available films, with descriptions, will be furnished on request.

The following motion picture films were loaned by the Motion Picture Lending Library of the State Medical Association during February:

Blood Transfusion, the Technique of (Available through the courtesy of Mead Johnson & Company)—Gregg County Medical Society, Longview.

Choose to Live (Available through the courtesy of the United States Public Health Service and the American Society for the Control of Cancer)—Delta Rho Delta Sorority, Fort Worth.

Goiter Surgery (Available through the courtesy of Mead Johnson & Company)—Johnson County Medical Society, Cleburne.

Goodbye, Mr. Germ (Available through the courtesy of the Texas Tuberculosis Association)—Mineral Wells-Palo Pinto County Health Unit, Board of Health, and the Tuberculosis Association, Mineral Wells, and Gordon School, Gordon.

Roentgen Pelvimetry (Available through the courtesy of Mead Johnson & Company)—Johnson County Medical Society, Cleburne.

NEWS

Contributions to this department will be appreciated. News should be of general medical interest, such as public health activities, new hospitals, personal items of more than local value, etc. News for a particular number of the JOURNAL should be in the hands of the Editor not later than the fifteenth of the preceding month.

Kentucky Plan for Rural Physicians.—The Kentucky State Medical Association has launched a plan to encourage physicians to practice in rural areas in need of medical service, reports *The Journal of the American Medical Association.* A revolving fund of $50,000 to $75,000 will be set up as a scholarship fund for medical students who agree to practice in country districts after graduation. Tentative plans call for assistance to ten students annually on an estimated tuition of $550. In addition to promising to practice in rural areas, the students would be expected to repay the principal within ten years at nominal interest.

A Program for Placing Pediatricians has been set up in the office of the secretary of the American Academy of Pediatrics, Dr. Clifford G. Grules, 636 Church Street, Evanston, Ill., aided by a grant of $10,000 from Mead Johnson and Company, states *The Journal of the American Medical Association.* The program, which is not to be confined to members of the Academy and is designed particularly for physicians being released from the Armed Services, will include recommendation for refresher courses and for residencies and other advanced positions which are vacant.

The Council on Scientific Work of the State Medical Association met in Waco on February 24 to consider arrangements for the annual session in Galveston May 6, 7, 8, and 9. Twenty-one were present for the meeting, including representatives of all eight scientific sections, the permanent Council, and ex-officio members. This meeting took the place of the one usually held about January 15, having been postponed this year because war conditions delayed plans for the 1946 session and it was hoped program arrangements might be more nearly complete by the later date.

Section officers in most instances reported enthusiastic response from contributors to the scientific programs and submitted almost complete programs for approval by the Council. In addition to approving the section programs and arrangements for honor guests, the Council considered revisions for the "Memorandum for the Council on Scientific Work." The supply of this pamphlet was almost exhausted, and the Council authorized considerable revision in the new edition, most of the revisions, however, to be in line with practices already being carried out but not previously printed in the Memorandum. The Council also adopted for the 1946 session the same schedule of activities which has been followed in the last several annual sessions. The complete program of the annual session will be published, as per custom each year, in the April JOURNAL.

The Texas Surgical Society will meet in Temple on April 1 and 2. The guests for the meeting will be Dr. Louis Byars, professor of plastic surgery, Washington University School of Medicine, St. Louis, and Dr. R. L. Sanders, professor of surgery, University of Tennessee College of Medicine, Memphis, according to the Society's secretary, Dr. Walter G. Stuck, San Antonio. There will also be a clinic meeting at the Scott and White Clinic.

Hospital News.—Providence Hospital, Waco, late in January elected a staff of returned servicemen, composed of Dr. M. B. Ainsworth, president; Dr. Thomas M. Oliver, vice-president; and Dr. Maurice C. Barnes, secretary, to succeed Dr. C. G. Catto, chief of staff; Dr. H. R. Dudgeon, Sr., vice-president; and Dr. R. B. Alexander, secretary, informs the Waco *Tribune-Herald.*

Nocona will have a modern, thirteen bed hospital soon, according to the Bowie *News.* The Nocona Chamber of Commerce sponsored purchase of a site near the center of the city, and Mr. and Mrs. David Major of Bowie have let contract for a $45,000 building. The hospital, to be known as the Major Hospital, will be operated by three sons of Mr. and Mrs. Major: Dr. D. A. Major, City-County Hospital, Fort Worth; Dr. R. A. Major, Billings General Hospital, Fort Benjamin, Ind.; and Dr. J. W. Major, Barksdale Field, La., all of whom have been in the Armed Forces. Mrs. D. A. Major and Mrs. J. W. Major, both graduate nurses, and Mrs. R. A. Major, whose field is business administration, will also participate in the hospital program.

Stamford Sanitarium stock owned for some years by Dr. Dallas Southard has been purchased by Dr. George Pryor, Jr. and Dr. Tom Bunkley, both of whom have recently returned from military service, states the Stamford *American.* Dr. Southard will continue to practice in connection with the hospital.

The De Leon Clinic is being remodeled, according to the De Leon *Free Press.* Dr. H. M. Webb, owner of the clinic, says that when improvements are completed, there will be six rooms to care for patients and it will be possible for the staff to do major surgical operations in De Leon.

The Jefferson Davis Hospital, Houston, staff elected Dr. C. A. Calhoun, president; Dr. W. A. Red, vice-president; Dr. Clyde M. Warner, chief of surgical division; Dr. Ray G. Collins, chief of medical division; and Dr. W. A. Clark, secretary at its annual meeting in January, states the Houston *Post.*

Memorial Hospital of Martin County, which is being established in Stanton by the coöperative efforts of citizens of the county, will be under the

direction of Dr. Virgil Sanders and Dr. Nell Sanders, who have been associated with Malone and Hogan Clinic Hospital in Big Spring, states the Big Spring *News*. Until the new hospital building is completed, the equipment and building formerly used by the Stanton Hospital Clinic will be utilized for the Memorial Hospital.

The Payne Hospital, Eastland, has been purchased from Dr. T. E. Payne by Mr. and Mrs. Sam Ruble, according to the Eastland *Record*. The hospital, which has twelve beds, a clinical laboratory, and x-ray equipment, will be operated by Miss Mary Lou Begley, daughter of Mrs. Ruble, who has most recently been employed with the U. S. Geological Survey at Austin but was previously in private and public health work at Hillcrest Hospital, Tulsa, Okla., and the Texas State Health Department. Dr. Payne will resume full-time private practice in Eastland.

Lamar Hospital, Paris, reorganized its staff in January, electing Dr. John Arch Stephens chairman to succeed Dr. Elbert Goolsby, reports the Paris *News*. Mrs. Dorothy Briney, hospital superintendent, was elected secretary. New members of the staff at the luncheon meeting were Dr. Hugh Parchman, Dr. R. L. Lewis, and Dr. Anna Hammond Joplin, all former Parisians, and the latter's husband, Dr. J. L. Joplin, formerly of Taylor.

The Andrew S. Tomb Clinic-Hospital, Seminole, has a new building which will make possible a capacity of twenty-two beds and eight bassinets. The new building, which will house the hospital, leaving the older building for clinic, laboratory, and x-ray use, is air-conditioned and has operating room and nursery facilities. The clinic-hospital is owned and operated by Dr. Andrew S. Tomb, with Mrs. Annie Boyd, R. N., superintendent of nurses and L. A. Carney director of laboratories. Since the Gaines County General Hospital closed in January, the Tomb Hospital is the only such institution serving Gaines and Yoakum Counties.

Wilson N. Jones Hospital, Sherman, has new staff officers elected February 4, according to the Sherman *Democrat*. Dr. Herman Klapproth is chief of staff; Dr. A. L. Ridings, vice-president; and Dr. C. D. Strother continues as secretary-treasurer. Dr. Max Woodward is out-going chief of staff; Dr. Frank Sporer, out-going vice-president.

Nix Hospital, San Antonio, reorganized its staff January 29, electing the following officers: Dr. W. W. Bondurant, president; Dr. Carl Geisecke, vice-president; Dr. Al Hartman, secretary; Dr. Herbert Hill, chief of the teaching staff; Dr. Gustav A. Pagenstecher, chief of surgery; Dr. Julian Barton, chief of medical service; Dr. Walter Stuck, chief of orthopedics; Dr. Elmer T. Coates, chief of obstetrics; and Dr. George Paschal, chief of anesthesia. Of these, according to the San Antonio *Express*, Drs. Bondurant, Geisecke, Hartman, Hill, and Coates have only recently returned to private practice after serving in the Armed Forces.

Upshur County Health Unit will have a full-time director, Dr. J. G. Daniels, informs the Gilmer *Mirror*. A group of interested Upshur County citizens, the commissioners court, representatives of the Health Unit, and a consultant from the State Health Department met in Gilmer January 22 to thresh out problems of the Health Unit. The appointment of Dr. Daniels was approved by the local persons interested and also by the State Health Department. During the war the unit was served by Dr. W. R. Ross, of Tyler, on a part-time basis. Another result of the discussion meeting was an agreement that matters concerning the Health Unit would be taken to the board of directors of the unit rather than always to the commissioners court.

Establishment of a Lufkin-Angelina County Health Unit was adopted as the primary project of the newly organized Junior Chamber of Commerce in Lufkin January 31, states the Lufkin *News*. The membership of seventy young men, after hearing an explanation by Dr. Byford Denman of serious health and sanitation problems in the area, unanimously voiced approval of the officers and directors in choosing the problem for major consideration during the coming six months and agreed to coöperate with the Lufkin Lions Club, which has already done some "spade work" on the project.

Donations to the Dr. James L. Rentfro Memorial Fund have already passed the $3,000 mark, according to Marshall Watson, chairman. No organized campaign is being conducted, but voluntary cash contributions honoring the late Brownsville physician are being received in the hope that as much as $25,000 will be made available for the construction of an addition to Mercy Hospital in Brownsville to accommodate twenty-five beds in semi-private rooms. The structure would be known as the "James L. Rentfro Wing," a one-story annex constructed so as to enable other stories up to three to be added later if necessary. Donations are being received by Mr. Watson at the Pan American State Bank, Brownsville, as well as at other points in Brownsville, informs the Brownsville *Herald*.

The Tornado at Nacogdoches which took a heavy toll of lives and property January 4 created an emergency in which Lufkin physicians and nurses were called on for help, according to the Lufkin *News*. A telephone call from the stricken town to Dr. Byford Denman, president of the Angelina County Medical Society, resulted in Dr. Denman, Dr. J. E. Klein, and several nurses from Lufkin going to Nacogdoches in company with Army personnel and prisoners from the German prisoner of war camp at Lufkin. First aid equipment was also made available by the camp officials. Lufkin doctors and nurses treated approximately twenty or twenty-five persons, many of them critically hurt, during a three-hour period.

The Dallas County Medical Plan of Prepaid Medical Care was discussed at the Medical Service Plans Council of America in Chicago during February by Millard J. Heath, executive director of the plan, states the Dallas *News*. Mr. Heath thought important features of the Dallas plan might be accepted for use on a nationwide basis. The meeting in Chicago was called to carry out a recent resolution of the American Medical Association house of delegates calling for prompt development of a specific national health program "with emphasis upon the nationwide operation of locally administered prepayment plans sponsored by medical societies."

A Tuberculosis Testing Program in Highland Park Schools was approved by the board of education and was to be begun during February, reports the Park Cities *News*. The testing, under the direction of the Dallas Tuberculosis Association, was made available to students of the seventh grade in junior high and of all grades in senior high schools. The tests are not compulsory and are given only by request and permission of parents. After this year the service will be available only to seventh and tenth grade students.

Establishment of a Blood Bank at Houston was discussed by Dr. Paul Wheeler, associate professor of pathology at Baylor University College of Medicine, at a meeting of the Medical Service Society of Houston during January. The Society, composed of representatives of pharmaceutical firms, is seeking to create interest in the organization of a blood bank for the Houston area, which, according to the Society's president, Lyle H. Gray, is vitally in need of such service. Dr. Wheeler, who organized a blood bank at a large hospital in St. Louis, estimated that to establish a Houston bank would require at

least $30,000. He advocated setting up a blood bank as a separate institution operated on a twenty-four hour basis, with two donations in return for every issue of blood to keep an adequate supply on hand. —Houston *Post*.

The Houston Society of Internal Medicine held its first meeting January 18, electing Dr. M. L. Graves, president; Dr. Paul V. Ledbetter, vice-president; and Dr. H. N. Gemoets, secretary. The first organization of its kind in Texas, according to the Houston *Post*, the Society will study medical problems of local and general interest and will be affiliated with the Houston Academy of Medicine and the State Medical Association. Outstanding figures in the field of medicine will be guest speakers at the Society's quarterly meetings. Charter members include Dr. Alvis E. Greer, Dr. B. F. Smith, and Dr. LeRoy B. Duggan. Approximately twenty internists were present at the first meeting.

Reorganization of the Medical Staff at Baylor University Hospital, Dallas, with creation of a medical board to supervise the hospital's teaching program, has been announced by the Dallas Executive Committee of the Bayor University Board of Trustees.

The medical board will be composed of thirteen Dallas physicians appointed by the trustees as chiefs of the various medical and surgical services. Purpose of the body will be the raising of hospital standards, furthering graduate instruction and medical research, direction of the staff, and organization and supervision of the teaching program for residents and interns at Baylor. It will also coöperate in the teaching of medical students at Southwestern Medical College and assist in dissemination of medical information to the public. Baylor's open staff policy will be continued and the hospital will remain open to all members of the Dallas County Medical Society.

The trustees' appointments to the medical board as chiefs of services for 1946 are: anesthesiology, Dr. Earl F. Weir; internal medicine, Dr. Henry M. Winans; neurological surgery, Dr. Albert D'Errico; obstetrics and gynecology, Dr. W. K. Strother, Jr.; ophthalmology, Dr. Lester H. Quinn; orthopedic surgery, Dr. Felix L. Butte; otolarynogology, Dr. Lyle M. Sellers; pathology, Dr. Joseph M. Hill; pediatrics, Dr. Robert Moore; psychiatry and neurology, Dr. Guy F. Witt; radiology, Dr. Frank M. Windrow; surgery, Dr. H. Walton Cochran; urology, Dr. A. I. Folsom.

The medical board elected as its officers chairman, Dr. Winans; vice-chairman, Dr. Folsom; and secretary-treasurer, Dr. Hill.

The board has selected the staff which will carry on the active teaching program. All other members of the Dallas County Medical Society will be included on the courtesy list. These staff appointments, presented upon unanimous recommendation of the medical board, have been approved by the trustees for the year ending December 31, 1946.

The staff will be composed of four classifications, as follows: (1) Consultants, those who will not take an active part in direction of the program but who, because of their outstanding qualifications and experience, will be looked to for advice and counselling; (2) Attending Physicians, those who have limited their work to one of the certified specialties, who have contributed much effort and interest to Baylor's teaching program in the past, and who will furnish most of the teachers and clinicians for the teaching program; (3) Associate Attending Physicians, those who are qualified as specialists by their certifying boards or have equivalent qualifications, and who have shown much interest in the teaching program but who are less experienced professionally or in the community; and (4) Junior Attending Physicians, those just out of residency or internship, now working toward certification by their specialty boards, who wish to assist in the teaching program. As they gain experience each group may be advanced to a higher classification, thus building a reservoir of medical teaching talent for future development of the program.

Baylor University College of Medicine was presented a certificate of appreciation from the Navy Department at a ceremony in the College library December 28, informs the Houston *Post*. Capt. J. E. Cooper, commanding officer of the Naval R. O. T. C. unit at Rice Institute, made the presentation honoring Baylor for its part in training Naval doctors throughout the war.

Southwestern Medical College—The board of trustees of Southwestern Medical Foundation at its annual meeting in Dallas January 17, reelected Dr. E. H. Cary to the presidency and also reelected to office Karl Hoblitzelle as vice-president and chairman of the executive committee; Fred M. Lange as vice-president and managing director; H. B. Sanders as general counsel; and Herbert Marcus as treasurer. According to the Dallas *Times-Herald*, Dr. Cary reported that within his knowledge there has never been any similar developments where as much has been accomplished in medical education, willingly supported by the citizens of the community, as has been achieved at Southwestern Medical Colliege since its organization two and a half years ago. He suggested that since the board of trustees for the first time has reached its full number of members permitted under its charter the following committees be created to handle the increasing business of the College and the Foundation: community relations, finance, building, budget, gifts and endowments. Dr. Tinsley R. Harrison, dean of faculty, stated that more than one hundred papers by scientists of the College have been published during the past year in leading medical journals of the nation. Mr. Lange reviewed the financial and business activities of the past year, reporting that more than one-half of the $1,315,000 raised in a recent operating fund campaign has already been paid to the Foundation.

Medical training at Southwestern Medical College under the Army Specialized Training Program will be terminated by the end of the current fiscal year, according to a letter from the Army Service Forces to the managing director of Southwestern Medical Foundation. The letter, received January 12, indicates that men separated from ASTP who plan to continue medical training will be transferred to the Enlisted Reserve Corps and released from active duty, while those who do not continue medical training will be continued on active duty in the Army, the Dallas *Times Herald* states. Termination of the Army program may bring adoption of a normal nine months' program at the College, which has been operating on an accelerated wartime schedule since its establishment in 1943, Dr. Donald Slaughter, dean of students, has announced. The Navy V-12 training program has already been discontinued.

University of Texas School of Medicine expansion was assured at the January meeting of the board of regents in Austin, informs the Galveston *News*. Construction of a wing to the present laboratory building in Galveston and the addition of a new building for the study of virus were approved and Dr. T. S. Painter, acting president, was authorized to proceed immediately with architectural plans for the buildings. The regents also approved the architectural plans for an addition to the Rebecca Sealy Nursing Home to provide additional accommodations for student nurses in connection with the construction of the new $2,000,000 general hospital, and named Miss Ethelyn Peterson to the newly created position of director of nursing service and associate professor of nursing at the John Sealy College of Nursing. Appropriation of $10,049 was made for

remodeling the Margie B. Stewart Home for Convalescent Children and for purchasing furniture and equipment.

In order to assure coördination and uniformity of standards of research at the University of Texas Medical Branch the faculty has selected a research council headed by Dr. Robert M. Moore, professor of surgery, to afford guidance and advice for staff members engaged in research.

M. F. Guyer, Ph. D., emeritus professor of zoology at the University of Wisconsin, has been visiting in Galveston and has given several lectures at the Medical Branch on genetic factors in disease. He has been given an honorary appointment as lecturer in genetics during his stay in Galveston.

Dr. Frank Hawking of the Medical Research Council, London, recently visited the University of Texas School of Medicine in connection with a tour of medical research centers in the United States engaged in the study of malaria and filariasis. While in Galveston, Dr. Hawking was presented in a seminar discussion on chemotherapy of tropical diseases.

Dr. E. L. King, professor of obstetrics, Tulane University School of Medicine, New Orleans, delivered the annual Alpha Omega Alpha lecture at the University of Texas Medical Branch on January 31. He also spoke at the annual banquet of the honor society that evening when new members were welcomed.

The Medical Dames, an organization of student's wives at the University of Texas School of Medicine, has established a fund for the annual award of a prize to the most scholarly and needy first year student.

The Cutter Laboratories, of Berkeley, Calif., has given $1,500 to the University of Texas for the support of studies by Dr. Wallace Sako, associate professor of pediatrics, on immunization in pertussis.

Dean A. M. Schwitalla, S. J., Ph. D., St. Louis University School of Medicine, spoke at the March 2 graduation exercises of the University of Texas Medical Branch.

Dr. Chauncey D. Leake, dean of the University of Texas School of Medicine, was presented the senior service award for outstanding community service by the Galveston Junior Chamber of Commerce at its twenty-fifth anniversary dinner at the Galvez Hotel January 24, informs the Galveston *News*. Dr. Leake and Duke T. Files, president of the Galveston County Community Council, who received the junior service award, were selected from a group of nominees presented to a special committee by local civic clubs.

Military Personals

Comdr. Robert H. Thomason, M. C., U. S. N. R., Huntsville, has recently been promoted from the rank of lieutenant commander, informs the Huntsville *Item*. Commander Thomason at the same time was made chief of the medical unit at the U. S. Naval Base, Corpus Christi.

Major Robert A. McCall, M. C., A. U. S., Ennis, has been cited for outstanding performance of duty in the Twentieth Air Force, Sixth Bombardment Group's last B-29 attack on Tokyo, at which time enemy planes made fanatic but futile attempt to prevent the destruction of the last important industrial section of Tokyo, according to the Ennis *Daily News*.

Col. Morris B. Badt, formerly of Fort Worth and a graduate of the University of Texas School of Medicine, has replaced Col. Norman L. Higinbotham as commanding officer of the Camp Swift regional hospital, reports the Austin *Statesman*.

Personals

Dr. Charles S. Venable, San Antonio, has given the University of Virginia Department of Medicine, Charlottesville, $1,500 in war bonds to support a lectureship in traumatic surgery which he established three years ago, according to *The Journal of the American Medical Association*. In the fall of 1942 Dr. Venable assigned to the university his royalty rights on an adjustable splint of his invention to establish a lectureship in memory of his father, the late Charles S. Venable, who was a professor of mathematics at the university for many years.

Dr. George R. Herrmann, professor of medicine at the University of Texas School of Medicine, Galveston, participated in the program of the Congress on Cancer and the Medical Assembly of Western Mexico, meeting at Guadalajara, Jal., Mexico, February 3-10, reporting his studies on cholesterol metabolism.

Dr. George M. Hilliard, who specializes in internal medicine, has recently joined the staff of Travis Clinic in Jacksonville. Prior to coming to Jacksonville, Dr. Hilliard was a lieutenant colonel in the Army.

Dr. Henry P. Ledford, Wichita Falls, was honored January 10 by the Wichita Falls Advertising Club as one of two persons named for outstanding personal and philanthropic service to Wichita Falls in 1945, according to the Wichita Falls *Record-News*. The award was made to Dr. Ledford in recognition of a substantial donation to the Young's Men Christian Association building fund; presentation of residence property to Hardin College for resale, the proceeds going to a dormitory building fund; and presentation with Mrs. Ledford of a grand piano to the music department of Hardin College.

Dr. W. C. Williams after more than forty years of continuous service in San Marcos has announced his retirement from practice because of ill health, reports the San Marcos *Record*. He has leased his office and equipment to *Dr. M. D. Heatly*, recently discharged from the Army, who served as chief of surgical service at Camp Swift from 1942 until his discharge.

Dr. Laurence M. Wiig, San Angelo, has left for Honolulu, Hawaii, his former home, to resume the practice of surgery. He is being succeeded at the San Angelo Medical and Surgical Clinic by *Dr. Gordon F. Madding*, formerly of Richland Center, Wis., who has recently been discharged from the Army as a lieutenant colonel. Dr. Madding served with the Second Auxiliary Surgical Group, spending thirty-one months overseas in support of the Thirty-sixth Division. He was awarded the Bronze Star for his services.

Mrs. Clyde B. Garrett, mother of *Dr. C. C. Garrett*, Fort Worth, died January 9, 1946.

Dr. and Mrs. Charles Southern, Burton, have been having their first vacation in seven years, informs the Taylor *Times*. Dr. Southern combined his vacation with study in Detroit and New York.

Dr. and Mrs. J. Hardin Perry, Fredericksburg, entertained the staff of Keidel Memorial Hospital at a Swedish supper January 5.

Dr. Hugh Sloan, Rice, who retired from active practice two years ago after practicing in that community more than fifty years, celebrated his eighty-eighth birthday February 2, reports the Ennis *Messenger*. His friends visited him and planned a shower of birthday cards to celebrate the event.

Dr. A. M. McElhannon and *Dr. H. L. Brown*, Sherman, were victims in January of a thief who took a total of $520 from the pockets of the surgeons' trousers, left in a dressing room at St. Vincent's Hospital while the doctors were busy in the surgery, according to the Sherman *Democrat*.

Dr. E. C. Mead, Gainesville, eye, ear, nose, and throat specialist, has announced his retirement from practice after a period of nearly thirty-three years, informs the Gainesville *Register*.

Dr. George P. Francis has been on leave of absence from the Rusk State Hospital to do special work in Austin in association with Dr. James V. Sparks,

states the Rusk *Cherokeean*. Dr. Francis has continued to be in his Rusk office one day a week.

Dr. A. P. Head, Ovalo, was injured January 5 in an automobile collision on the highway north of Lawn, reports the Abilene *Reporter-News*. He was taken to a hospital but was released shortly after treatment of head injuries.

Dr. Grady Deaton, Houston, has resigned as director of the Harris County health unit because of the press of private practice, the Houston *Post* reports.

Dr. Robert W. Webb, formerly of Dallas, has been appointed chief psychiatrist of a mental hygiene clinic to be installed at the Washington regional office of the Veterans Administration, informs the Rochester *Reporter*. Dr. Webb, son of Mr. and Mrs. N. B. Webb, of Rochester, has been on active duty with the Army Medical Corps for four years, during which time he has maintained a military membership in the Dallas County Medical Society and the State Medical Association.

Dr. Charles W. Castner since January 1 has been superintendent of the Austin State School and its branches, the Farm Colony and Inks Lake State School. Prior to that time he had been medical director of eleemosynary institutions for the State Board of Control in Austin after serving for many years as superintendent of the Wichita Falls State Hospital. The recent transfer was made at Dr. Castner's request.

SOCIETY NEWS

Bexar County Society

(Reported by J. L. Cochran, Secretary)

Bexar County Medical Society officers for 1946 are as follows: Victor C. Tucker, president; W. W. Bondurant, Jr., vice-president; J. L. Cochran, secretary-treasurer; H. M. Bush, J. W. Goode, R. E. Parrish, and L. B. Jackson, delegates; E. B. Dumas, Henry Hoskins, J. R. Nicholson, and R. A. Roberts, alternates; Conn L. Milburn (chairman), Thomas N. Goodson, Sidney R. Kaliski, W. H. Hargis, and A. F. Herff, legislative and public health committee; and Merton M. Minter (chairman), W. H. Cade, Kent Hunt, J. B. Copeland, and E. T. Coates, publicity and public relations.

Bowie County Society

(Reported by Charles C. Stuart, Secretary)

Bowie County Medical Society officers for 1946 are as follows: John H. Rives, president; Perry Priest, vice-president; Charles C. Stuart, secretary-treasurer; J. N. White, delegate; William Hibbitts, alternate; Joe E. Tyson, Charles Adna Smith, and William Hibbitts, committee on legislation and public relations.

Brazos-Robertson County Society

December 18, 1945

(Reported by R. B. Grant, Jr., Secretary)

Brazos-Robertson Counties Medical Society met December 18 and elected the following officers for the coming year: R. H. Harrison, Bryan, president; T. A. Searcy, Hearne, vice-president; R. B. Grant, Jr., Bryan, secretary-treasurer; S. C. Richardson, Bryan, delegate; R. B. Grant, Jr., alternate; and J. G. Sanders (Bremond) (chairman), T. T. Walton (Bryan), and T. A. Searcy, committee on legislation and public relations.

January 15, 1946

(Reported by R. B. Grant, Jr., Secretary)

Antibiotics—R. B. Grant, Jr., Bryan.

Brazos-Robertson Counties Medical Society met January 15 at Bryan. The officers for 1946 were installed, and the matter of state dues was discussed.

Dr. H. W. Cummings, Hearne, a past president of the State Medical Association, was elected to honorary membership for life and it was voted to nominate Dr. Cummings for honorary membership in the State Medical Association.

R. B. Grant, Jr., spoke on antibiotics.

Camp County Society

(Reported by J. K. Bates, Secretary)

Camp County Medical Society has announced the following officers for 1946: R. Y. Lacy, president; J. H. Mitchell, vice-president; J. K. Bates, secretary-treasurer; J. K. Bates, delegate; R. L. Johnson, alternate; J. H. Mitchell, R. L. Johnson, and P. A. Reitz, committee on legislation and public relations. All are of Pittsburg.

Cooke County Society

January 14, 1946

Cooke County Medical Society met January 14, electing the following officers for 1946: H. P. Hawk, president; I. L. Thomas, vice-president; James W. Atchison, secretary; H. P. Hawk, delegate; Rufus C. Whiddon, alternate; C. B. Thayer (reëlected), censor.

Gainesville will be host to the North Texas District Medical Society, of which Dr. Thayer is president, early in June.

Dallas County Society

(Reported by W. W. Fowler, Secretary)

Committees appointed for 1946 are as follows: *program*, Andrew B. Small (chairman), Alvin Baldwin, Jr. (vice-chairman), Gladys J. Fashena (second vice-chairman), C. T. Ashworth, J. S. Bagwell, C. D. Bussey, G. D. Carlson, Brandon Carrell, C. B. Carter, W. P. Devereaux, Arthur Grollman, B. A. Knickerbocker, Barton E. Park, E. L. Rippy, and Margaret Watkins; *public relations, public health, and medical care*, Elliott Mendenhall, general chairman, and Jack G. Kerr, general vice-chairman; *section on legislation and publicity*, M. O. Rouse (vice-chairman), J. W. Bass, G. E. Brereton, Ella M. George, W. F. Guerriero, Donald G. Kilgore, O. M. Marchman, Tate Miller, H. A. O'Brien, Frank Selecman, L. M. Sellers, Richard Smith, Donald Slaughter, Guy F. Witt, and Edward White; *section on public health*, John G. Young (vice-chairman), Jo C. Alexander, Eugene L. Aten, J. H. Black, Nina Fay Calhoun, J. W. Duckett, H. E. Duncan, J. L. Goforth, J. Shirley Hodges, W. F. Mengert, Robert H. Moore, A. G. Schoch, S. A. Shelburne, and Hall Shannon; *section on medical care*, D. W. Carter, Jr. (vice-chairman), Lee J. Alexander, W. J. Allison, J. S. Chapman, Ruby K. Daniels, Tinsley Harrison, C. L. Martin, C. O. Patterson, W. G. Reddick, George A. Schenewerk, L. B. Sheffield, R. A. Trumbull, and Ozro T. Woods.

School health education, J. H. Black (chairman), W. F. Guerriero (vice-chairman and director), Nina Fay Calhoun, D. W. Carter, Jr., J. H. Duckett, Ella M. George, J. L. Goforth, J. Shirley Hodges, Donald G. Kilgore, H. A. O'Brien, and L. B. Sheffield; *grievance*, Raworth Williams (chairman), R. B. McBride (vice-chairman), L. E. Allday, Felix L. Butte, T. M. Kirksey, L. S. Thompson, and W. B. Wilkinson; *military affairs*, Davis Spangler (chairman), F. H. Newton (vice-chairman), J. H. Black, R. W. Cowart, H. K. Crutcher, J. L. Goforth, and Wayne T. Robinson; *assistance to returning physicians*, Curtice Rosser (chairman), Tate Miller (vice-chairman), Jo C. Alexander, T. S. Love, and R. F. Short; *auditing*, A. T. Morris, G. A. Hart, and Casey E. Patterson; *parliamentarian*, C. C. Nash.

January 17, 1946

Dallas County Medical Society held its annual banquet January 17 at the Dallas Athletic Club with approximately 100 physicians who have returned from the armed services as honor guests.

The program was under the direction of M. O. Rouse, chairman of the program committee.

A memorial for the two Dallas doctors who died in service, Dr. Tom H. Cheavens and Dr. Gus Thomasson, Jr., was proposed at the banquet.

Tinsley Harrison, dean of faculty at Southwestern Medical College, explained the college's role in supervising veterans hospitals in the Dallas area, and Tate Miller, former Navy captain, spoke on behalf of the returned veterans. Edward W. Brady, Dallas pharmaceutical representative, gave a brief sketch of each physician who entered service. Douglas Haynes directed the music.

Everett C. Fox, new president of the Society, was installed by the retiring president, G. E. Brereton.

Society records show that its membership of 600 makes it the largest in the state.

El Paso County Society
January 8, 1946

El Paso County Medical Society meeting January 8 voted to accept the Turner home bequeathed to it in the will of the late Dr. S. T. Turner. The society decided to purchase the life interest of Mrs. Lucy Turner, widow of Dr. Turner, who was given use of the property during her lifetime according to provisions of the will. The will also provided that the home be known as the Turner Home of the El Paso County Medical Society. The Society plans to repair the property and convert it into a meeting place and library at an approximate cost of $10,000.

Galveston County Society
January 11, 1946

(Reported by John McGivney, Secretary)

Transfusion Reaction (illustrated)—H. J. Schattenberg, San Antonio.

Galveston County Medical Society met January 11, with the new president, Francis Garbade, presiding.

The committees appointed by the president for the year were announced as follows: C. T. Stone (chairman), Willard Cooke, and Titus Harris, military affairs; Raymond Gregory (chairman), Edgar Poth, and Herman Weinert, program; John McGivney (chairman), C. T. Mares, and William B. Sharp, public health; Charles A. Hooks (chairman), Hamilton Ford, Emil Klatt, and B. R. Parrish, legislative; William F. Spiller (chairman), R. E. Cone, and H. Reid Robinson, social hygiene; Titus Harris (chairman), Weldon W. Stephen, and George T. Lee, economics; and William B. Marr (chairman), E. V. Ritchie, and George M. Decherd, public relations.

A letter regarding the transfer of membership of E. E. Wilkinson from the Davison County Medical Society, Nashville, Tenn., was read.

Paul Brindley introduced the visiting speaker, H. J. Schattenberg, pathologist of Medical and Surgical Memorial Hospital, San Antonio, who presented an illustrated talk on transfusion reactions. He outlined the causes of transfusion reactions as follows: blood incompatibility because of the Rh factor, anuria-uremia, or errors in typing; toxicity of sodium citrate; anaphalytic and allergic reactions; speed of administration; impure water—pyrogens; unclean apparatus; infections caused by virus, syphilis, or malaria; and excessive iron deposits in the recipient after repeated transfusion. The talk was discussed by A. E. Hansen, William C. Levin, and H. H. Sweets.

Gray-Wheeler Counties Society
(Reported by W. Purviance, Secretary)

Gray-Wheeler Counties Medical Society has elected officers for the year as follows: R. M. Bellamy, Pampa, president; G. R. Walker, Wheeler, vice-president for Wheeler County; K. W. Pieratt, Pampa, vice-president for Gray County; W. Purviance, Pampa, secretary-treasurer; H. E. Nicholson, Wheeler, delegate; H. E. Nicholson, M. C. Overton (Pampa), and Calvin W. Jones (Pampa), committee on legislation and public relations.

Hale-Floyd-Briscoe-Swisher Counties Society
(Reported by L. C. Wayland, Secretary)

Hale-Floyd-Briscoe-Swisher Counties Medical Society has reported the following officers for 1946: George V. Smith, Floydada, president; E. P. Stewart, Tulia, vice-president; L. C. Wayland, Plainview, secretary-treasurer; and E. O. Nichols, Jr., Plainview, alternate.

Hunt-Rockwall-Rains Counties Society
January 19, 1946

(Reported by Harriet Rogers, Secretary)

Experience with Basic Science Law in Other States and Its Possibilities in Texas—R. B. Anderson, Fort Worth.

Hunt-Rockwall-Rains Counties Medical Society held a special call meeting January 19 with officers of the Woman's Auxiliary to hear a discussion by R. B. Anderson, Fort Worth, chairman of the Public Relations Committee of the State Medical Association, on legislative matters relating to medicine and public health.

Jasper-Newton Counties Society
(Reported by G. Mason Graham, Secretary)

Jasper-Newton Medical Society has announced the following officers for 1946: James N. Seale, Jasper, president; A. J. Richardson, Jasper, vice-president; G. Mason Graham, Bessmay, secretary-treasurer; W. F. McCreight, Kirbyville, delegate; J. J. McGrath, Jasper, alternate.

Jefferson County Society
(Reported by L. R. Byrd, Jr., Secretary)

Jefferson County Medical Society has announced the following committees for 1946: legislation and public health, L. C. Heare, Port Arthur (chairman), L. C. Powell, Beaumont (co-chairman); R. R. Orrill, Port Arthur; Stuart T. Wier, Beaumont; and Talbot A. Tumbleson, Beaumont; and public relations, T. A. Fears, Beaumont (chairman); A. R. Autrey, Port Arthur (co-chairman); E. D. Mills, Beaumont; W. E. McRee, Port Arthur; and T. L. Pentecost, Beaumont.

Karnes-Wilson Counties Medical Society
January 8, 1946

(Reported by J. V. Blake, Jr., Secretary)

Karnes-Wilson Counties Medical Society, meeting in Floresville January 8, elected the following officers for 1946: S. E. Shannon, Karnes City, president; H. J. Bonnstetter, Kenedy, vice-president; and J. V. Blake, Jr., Floresville, secretary-treasurer.

The Society has decided to meet monthly instead of quarterly as has formerly been the practice. Ten members attended the January meeting.

Medina-Uvalde-Maverick-Val Verde-Edwards-Real-Kinney-Terrell-Zavala Counties Society
(Reported by Orin McMillan, Secretary

Medina-Uvalde-Maverick-Val Verde-Edwards-Real-Kinney-Terrell-Zavala Counties Medical Society has elected the following officers for 1946: Hershall La Forge, Uvalde, president; Norvill Graham, Del Rio, vice-president; Orin McMillan, Eagle Pass, secretary-treasurer; Cary Poindexter, Crystal City, delegate, and J. D. Williamson, Castroville, alternate.

Navarro County Society
(Reported by W. R. Sneed, Secretary)

Navarro County Medical Society has reported that in addition to the officers listed in the February JOURNAL the following will serve during 1946: J. Wilson David, Corsicana, delegate; Gurley H.

Sanders, Kerens, alternate; and Gurley H. Sanders, Will Miller (Corsicana), and W. K. Logsdon (Corsicana), committee on legislation and public relations.

Nueces County Society

(Reported by Foy H. Moody, Secretary)

Nueces County Medical Society has elected officers for 1946 as follows: T. W. Edwards, president; N. D. Carter, vice-president; Foy H. Moody, secretary-treasurer; C. P. Yeager and G. T. Moller, delegates; J. F. Pilcher and Y. C. Smith, alternates; J. F. Pilcher, C. P. Jasperson, and McIver Furman, committee on legislation and public relations.

Palo Pinto-Parker Counties Society

January 8, 1946

(Reported by E. M. Russell, Secretary)

Palo Pinto-Parker Counties Medical Society met in Weatherford on January 8, electing the following officers for 1946: W. B. Lasater, Mineral Wells, president; C. B. Williams, Mineral Wells, vice-president; E. F. Yeager, Mineral Wells, secretary; J. E. Smith, Palo Pinto, delegate; E. F. Yeager, alternate; and Paul C. Pedigo, Strawn, censor.

It was decided to allot the Society's program to members by the month, with the appointed members responsible for the scientific program during their particular month. Total assessment of $22 for dues for the year was agreed upon.

Potter County Society

(Reported by George M. Waddill, Jr., Secretary)

Potter County Medical Society has announced the following officers for 1946: R. R. Swindell, president; E. A. Rowley, vice-president; George M. Waddill, Jr., secretary-treasurer; A. E. Winsett, delegate; D. S. Marsalis, alternate; and A. E. Winsett, W. R. Klingensmith, and Royal F. Wertz, committee on legislation and public relations.

Shelby-San Augustine-Sabine Counties Society

(Reported by W. H. Warren, Secretary)

Shelby-San Augustine-Sabine Counties Medical Society has chosen the following officers for the current year: W. C. Windham, president; T. L. Hurst, vice-president; W. H. Warren, secretary-treasurer and delegate; L. S. Oates, alternate; T. L. Hurst and W. C. Windham, committee on legislation and public relations.

Tarrant County Society

February 5, 1946

(Reported by W. P. Higgins, Jr., Secretary)

Treatment of Peptic Ulcer—Charles T. Stone, Professor of Medicine, University of Texas School of Medicine, Galveston.

Surgical Aspects of Diseases of the Lung—A. O. Singleton, Professor of Surgery, University of Texas School of Medicine, Galveston.

Tarrant County Medical Society met February 5 at the Medical Arts Auditorium in Fort Worth with eighty-six members and four visitors present. The above scientific program was carried out. The talk by Dr. Stone was discussed by DeWitt Neighbors and Harold J. Shelley; the one by Dr. Singleton by John A. Wiggins, Jr. and George R. Enloe.

R. G. Baker, chairman of the legislative and public relations committee, reported that the advertising campaign in opposition to the Wagner-Murray-Dingell bills had been postponed because of lack of funds. He asked for additional voluntary contributions and members present responded by donating $1,055.

Cooper M. Conner, George W. Jewell, Jr., Kenneth G. Moore, George P. Bain, and Jack C. Riley, the latter two interns, were elected to membership upon application.

A. L. Roberts, president of the Northwest Texas District Medical Society, announced that that Society would meet in Eastland on March 28.

Tom Green Eight County Society

January 7, 1946

(Reported by R. M. Finks, Secretary)

Pending Legislative Measures Affecting Medical Practice—Cecil H. Barnes, San Angelo, Representative for Ninety-First District, Texas House of Representatives.

Tom Green Eight County Medical Society met at Hotel Cactus, San Angelo, January 7 with Grady Mitchell, President, presiding. Twenty members and guests were present.

State Representative Cecil H. Barnes was guest speaker, discussing legislation now pending which would affect medical practice. Mr. Barnes among other things stated that he had voted for the bill to control chiropractors because they "are a reality although without legal status." In his opinion prosecution has failed to curb them and legislation might aid in bringing them under control. He expressed an openmindedness in regard to any plan which might be passed for their control.

V. E. Schulze discussed the address and suggested that the solution to the problem might lie in a basic science law, and proposed a resolution for the endorsement of a bill for the enactment of such a law in the coming Legislature. After a second by R. E. Windham, Representative Barnes and representatives of the local press withdrew from the meeting. Following a general discussion of the matter, the resolution proposed by Dr. Schulze was adopted by acclamation and all physicians present signed the resolution.

William Byron Roberts, William Lacy Smith, and Perry J. C. Byars were elected to membership by acclamation upon application.

W. D. Anderson, chairman of a committee to investigate the public health unit in San Angelo, reported that in the opinion of the committee the cost of operating the unit was too high and "that the Unit was not functioning properly and should have a change for the better." E. W. Prothro, director of the unit, explained the purpose and function of the unit and invited members of the Society to visit the unit. R. L. Powers moved, seconded and amended by J. A. Bunyard, that the Society vote by secret ballot to accept or reject the public health unit. The result was a vote of 14 to 7 to retain the unit.

K. B. Round was elected by acclamation to fill the vacancy on the City Board of Health occasioned by the resignation of Aubrey Lewis.

Upshur County Society

January 2, 1946

(Reported by T. E. Marshall, Secretary)

Upshur County Medical Society met January 2 in Gilmer, electing the following officers to serve for two years: W. Looney Fenlaw, Gilmer, president, and Hugh M. Ragland, Gilmer, secretary.

Walker-Madison-Trinity Counties Society

(Reported by W. A. Goodrich, Secretary)

Walker-Madison-Trinity Counties Medical Society has announced the following officers for 1946: M. D. Hanson, Huntsville, president; Jesse B. Heath, Madisonville, vice-president; W. B. Veazey, Huntsville, secretary-treasurer; L. E. Bush, Huntsville, delegate; W. B. Veazey, alternate; and L. E. Bush, J. E. Morris (Madisonville), and S. M. Briscoe (Trinity), committee on legislation and public relations.

Webb-Zapata-Jim Hogg Counties Society

Webb-Zapata-Jim Hogg Counties Medical Society recently adopted resolutions on the death of Dr. Holcombe M. Austin, Laredo, who died November 18, 1945. The resolutions, copy of which was furnished to Dr. Austin's family and to the press, stated in part: "we do hereby wish to express our gratitude for and earnest appreciation of our asso-

COLLEGE OF PHYSICIA

ciation with a man who was so beloved as a personal friend to rich and poor alike, so valued as a progressive citizen and generous giver of time and money, above all, so respected and appreciated in his professional work."

Wharton-Jackson-Matagorda-Fort Bend Counties Society

January 9, 1946

Wharton-Jackson-Matagorda-Fort Bend Counties Medical Society held a dinner meeting at the Community Center in Wharton January 9. Thirty-one doctors and their wives were present. R. B. Anderson, Fort Worth, chairman of the Public Relations Committee of the State Medical Association, discussed the problems incident to state control of medicine. F. J. L. Blasingame, Wharton, was one of two delegates from Texas chosen to attend a meeting for further investigation of proposed legislation on that subject held in St. Louis January 18 and 19.

Wilbarger County Society

January 15, 1946

(Reported by Raymond A. Lemee, Secretary)

Wilbarger County Medical Society met January 15 at Vernon for the election of officers. Alvin L. Borchardt was elected president, succeeding W. C. Coleman; Joe Shipman was reëlected vice-president; Raymond A. Lemee was elected secretary-treasurer; L. L. Slaugenhop was elected delegate; and Emory D. Hollar was elected alternate. Plans for the year's activities were discussed.

AUXILIARY NOTES

Officers of the Woman's Auxiliary to the State Medical Association of Texas: President, Mrs. C. B. Alexander, San Antonio; President-Elect, Mrs. George Turner, El Paso; First Vice-President, Mrs. S. M. Hill, Dallas; Second Vice-President, Mrs. L. W. O. Janssen, Corpus Christi; Third Vice-President, Mrs. Troy A. Shafer, Harlingen; Fourth Vice-President, Mrs. Mark H. Latimer, Houston; Treasurer, Mrs. F. R. Rugeley, Wharton; Recording Secretary, Mrs. Paul H. Power, Waco; Corresponding Secretary, Mrs. Wilbur Robertson, San Antonio; Publicity Secretary, Mrs. E. L. Howard, Fort Worth; Parliamentarian, Mrs. W. R. Klingensmith, Amarillo.

AUXILIARY NEWS

Bowie-Miller Counties Auxiliary met jointly with the Medical Society and their invited guests at the annual Christmas dinner party held at Hotel Grim in Texarkana December 14.

Dr. Arild E. Hansen, professor of pediatrics, University of Texas School of Medicine, Galveston, was guest speaker, introduced by Dr. C. E. Kitchens. Dr. Hansen spoke on disturbance of the endocrine glands and illustrated rare cases by slides.

Mrs. William Hibbitts, Auxiliary president, was toastmistress. She introduced Mrs. Hansen; Dr. C. H. Frank, president of the Bowie County Medical Society; Mr. and Mrs. Wilbur Smith; and Dr. Allen Collom, recently returned from overseas service.

After dinner Mr. Smith entertained with caricatures and exaggerations and then presented a skit showing a meeting of the Auxiliary in the "gay 'nineties." Members of the cast were as follows: hostess, Flora Kemp; president, Nettie Kosminsky; secretary-treasurer, Ruth Baskett; chairman of culture achievements, Lena Robinson; chairman of card parties, Lillian Cross and Ruth Kittrell; ticket chairman, Margaret Rives; chairman of terpsichore, Ethel David; epicure of fine arts, Katherine Hibbitts; member at large and a song bird, Miriam Daubs; accompanist, Mrs. Smith. The cast, dressed in costumes of the 1890's, with song and pantomime enacted the Auxiliary meeting of fifty years ago. Mr. Smith won a prize for guessing who had received a ticket from Chairman Rives.

The U-shaped dinner table was decorated with greens, candles, Christmas balls, and silver birds. The speaker's table was centered by silver leaves flanked with candles.

Mrs. Kitchens entertained the Auxiliary and was in charge of arrangements. Table decorations were in charge of Mrs. Hibbitts, Mrs. Kirkpatrick, and Mrs. Harry Murry.—Mrs. Ralph Cross, Secretary.

Bowie-Miller Counties Auxiliary met in the home of Mrs. Harry Murry in Texarkana on January 25. Cohostesses were Mesdames A. G. Lee, E. M. Watts, and Mrs. N. W. Peacock, of Ashdown.

Dr. C. H. Frank was guest speaker, telling of the clinic to be held in Texarkana February 15 by the Women's Field Army of Cancer Control. He was introduced by Mrs. William Hibbitts, president.

Mrs. Roy Baskett and Mrs. Ralph Cross conducted a program consisting of a quiz on "American Women."

Members of the Auxiliary contributed to the infantile paralysis fund.

The dining room was decorated with spring flowers. Coffee and dessert were served by Mrs. Hibbitts and Mrs. Cross to twenty members.

Cherokee County Auxiliary met in Rusk January 22 with the Rusk members as hostesses. Mrs. R. T. Travis, president, presided.

It was decided to have the annual doctor's banquet February 26 in Jacksonville. Announcement was made that the Cherokee Auxiliary would be host to the district meeting of physicians and their wives in April. The annual report of the past year's work was written and directed to the officers of the State Auxiliary.

Officers elected for the year include Mrs. L. L. Travis, Jacksonville, president; Mrs. Johnny Travis, Jacksonville, vice-president; Mrs. T. H. Cobble, Rusk, recording secretary; Mrs. William H. Sory, Jacksonville, corresponding secretary-treasurer; and Mrs. T. A. Stevens, Jacksonville, reporter.

A social hour was held preceding the business meeting.—Mrs. T. A. Stevens, reporter.

Galveston County Auxiliary held a luncheon at the Galvez Hotel in Galveston on January 18 with sixty-five members and guests in attendance.

Dr. Mason Kahn, Galveston, who was with the Marine battalion taken prisoner by the Japanese in the invasion of Wake Island, was guest speaker. He told of his experiences as a prisoner and then answered questions from the audience.

The Auxiliary voted to hold a game day party on February 15 for the benefit of the loan fund for medical students. The following committee chairmen were named: Mrs. J. L. Jinkins, general chairman; Mrs. Eric Ogden, co-chairman; Mrs. George T. Lee, table sales; Mrs. W. T. Garbade, publicity; Mrs. H. Reid Robinson, sandwiches and cakes; Mrs. G. W. N. Eggers and Mrs. William Marr, prizes; and Mrs. William Gammon and Mrs. Edward Randall, refreshment table.

The group also voted to give $15 to the newly organized medical student glee club to purchase sheet music.

The following committee chairmen gave reports: Mrs. Raymond Gregory, local essay contest, and Mrs. Jesse B. Johnson, study and legislative work. Each member of the Auxiliary was given a copy of "Political Medicine" and "A Doctor Looks at State Medicine."

Mrs. W. T. Garbade won the attendance prize presented by Mrs. Jesse B. Johnson.

The essay contest, with Mrs. Gregory, Mrs. Charles Lankford, and Mrs. Carl Nau as a committee in charge, was opened February 1 in the five high schools of Galveston under the joint sponsorship of the Auxiliary and the County Medical Society. First prize of $25, contributed by the Medical Society, and second and third prizes of $15 and $10

respectively, contributed by the Auxiliary, will be awarded for the best essays on "How My Family and I Can Improve Health and Sanitation in Galveston."

Grayson County Auxiliary sponsored a blood collection at Denison January 31 to replenish the Grayson County blood plasma bank, which had furnished plasma to 110 persons during the previous few months. Mrs. E. L. Haley, Denison, and Mrs. Max R. Woodward, Sherman, were co-chairman of the blood plasma service for the Auxiliary, of which Mrs. W. A. Lee, Denison, is president.

The collection was made by the William Buchanan Foundation of Dallas. Drs. Charles Pelphry, C. A. Ambruster, and Allen Crenshaw, assisted by several nurses, nurses aides, and others, made the collection. All blood collected was taken to the Foundation for processing but was to be returned to Grayson County hospitals for use by citizens of this county. Ninety-six donors were pledged from Sherman, seventy-one from Denison, and there were additional volunteers who visited the mobile unit during the day.

Persons who use plasma from the county bank pay $25 a unit for it with the understanding that if they furnish two donors for each unit used, $20 will be refunded, or if they furnish one donor, $10 will be refunded. The $5 charge is for processing and handling the plasma. Mrs. Woodward explained that the patients who had used plasma recently owed the blood bank from two to six donors each, and that those sponsoring the blood bank preferred having donors to replace the blood than to have money.

Harris County Auxiliary observed Doctors' Day with an open meeting at the Museum of Fine Arts in Houston the morning of February 25. Members were particularly invited to bring guests.

Dr. Asa Chandler, professor of biology at Rice Institute, spoke on "Tropical Diseases in the United States, Past, Present, and Future."

Mrs. Norborne Powell was chairman of the day, assisted by Mrs. Enga M. Arnold. Hostesses were Mesdames Ralph Patrick, Otis P. Flynt, J. E. Bell, C. R. Berry, E. K. Chunn, Karl J. Karnaky, Morris Kilgore, E. H. Lancaster, Duncan C. McKeever, L. R. Lewis, J. B. Lucas, R. E. Maresh, George W. Purdue, Thomas G. Russell. Hugh C. Welch, A. L. W. Tackaberry, and William Lapat.—Mrs. Granville Q. Adams, press secretary.

Hunt-Rockwall-Rains Counties Auxiliary met in January at the home of Mrs. W. C. Trimble in Greenville with Mesdames E. R. Hayes, Joe Becton, and Bailey Birdsong as co-hostesses.

Following a devotional by Mrs. J. M. Hanchey and roll call on false propaganda, Mrs. E. T. Crim reviewed the book "One Hundred Million Guinea Pigs" by Arthur Kallet and J. F. Schlink.

Mrs. Fred Peak and Mrs. Charles H. Roadman, wives of new Greenville physicians, were elected to membership.

Refreshments were served during the social hour.

Taylor-Jones Counties Auxiliary met at the Abilene Club, Wooten Hotel, Abilene on December 11, entertaining the Medical Society at dinner.

A contribution of $30.25 was raised for the Goodfellows Fund, and a war bond drive resulted in pledges by the doctors of $25,600 in bonds.

New officers of the Medical Society were introduced. Dr. L. J. Pickard, outgoing president of the Society, thanked the Auxiliary for its work during the past year and the coöperation shown by its members with the Medical Society.

Twelfth District Auxiliary met in Waco January 8, electing Mrs. G. V. Brindley, Temple, president; Mrs. Shelley Spencer, Waco, vice-president; Mrs. John Winston, Temple, secretary; and Mrs. Boyd Alexander, Waco, publicity chairman. The Auxiliary joined the Medical Society, meeting at the same time, for a luncheon at which Dr. Elliott Mendenhall, Dallas, spoke.

Mrs. H. C. Thomas, wife of Dr. H. C. Thomas, of Fort Worth, a valued member of Tarrant County Auxiliary, died December 19, 1945.

BOOK NOTES

[1]**Pulmonary Tuberculosis in the Adult.** Its Fundamental Aspects. By Max Pinner, M. D. Chief, Division of Pulmonary Diseases, Montefiore Hospital for Chronic Diseases, New York; Editor, American Review of Tuberculosis; Clinical Professor of Medicine, College of Physicians and Surgeons, Columbia University, New York. Fabricoid, 579 pages. Price, $7.50. Springfield, Illinois, Charles C. Thomas, Publisher, 1945.

I am honored to have the opportunity to review this book. Knowing the author personally made it doubly interesting. He has contributed a very great deal to scientific literature and always only after sufficient research and scientific reasoning does he draw his conclusions. One should not read the book until he has first studied the preface because the author is his own critic and tells why the book is written.

Dr. Pinner handles the subject more from the standpoint of the pathologist than the clinician which is really the fundamental approach to all diseases. If one would master the chapters on tubercle bacillus, histogenesis, immunity, and phthisiogenetic principles, it should be easier to understand why the disease behaves so differently in individuals.

The book might be considered hard to read; it certainly takes concentration. I think anyone who reads it will find that frequent use of an academic and a medical dictionary will be a very worthwhile help.

I can wholeheartedly recommend the book to anyone who cares to go deeper into the subject of tuberculosis.

VENEREAL DISEASE ABSTRACTS*

The Synergistic Action of Penicillin and Mapharsen (Oxophenarsine Hydrochloride) in the Treatment of Experimental Syphilis. Harry Eagle, Harold J. Magnuson, and Ralph Fleischman, Journal of Venereal Disease Information, Washington, 27:3-9 (Jan.) 1946.

In a study of the treatment of experimental rabbit syphilis, the authors found that small fractions of the curative doses of penicillin and mapharsen administered together were not only curative but were therapeutically more effective together than might be expected from the additive effect of the quantity of the drugs administered. They concluded, therefore that penicillin and mapharsen act synergistically.

Five schedules were used in which 5 to 9 rabbits were treated at each of 4 to 6 different dosages of penicillin in order to establish the curative dose, expressed either as the CD50 or CD90 levels of penicillin (the dosage necessary to cure 50 and 90 per cent of the animals respectively). The penicillin (aqueous solution of commercial sodium salt) was given by two different methods. One method consisted of 2 intramuscular injections daily at six-hour intervals, continued for four days, with penicillin first being tested alone, then supplemented by 2 different dosages of mapharsen. The second method consisted of 5 injections daily at four-hour intervals, continued for four days with penicillin being tested both alone and supplemented by a subcurative dose of maphar-

[1]Reviewed by H. Frank Carman, M. D., Dallas, Texas.

*Abstracts of articles appearing in *The Journal of Venereal Disease Information* (formerly *Venereal Disease Infarmation*) prepared by the Venereal Disease Division, U. S. Public Health Service.

sen. Because mapharsen and penicillin in high concentrations were found to be chemically incompatible, the daily intravenous injection of the arsenical was always given half way between the penicillin injections.

Results of the first series tested showed that sodium penicillin injected alone twice daily for a period of four days proved relatively ineffective. A total dosage of 44,000 units per kilogram was required to cure half the animals, and approximately 80,000 units per kilogram of mapharsen injected once daily over the same four days decreased the CD50 dose to 6,000 units per kilogram, or to one-seventh of the corresponding curative dose with penicillin alone. One-fourth of a CD50 dose of mapharsen and one-seventh of a CD50 dose of penicillin constituted a CD50 dose when used in conjunction. By increasing the arsenozide dosage to 0.4 (ineffective when used alone), the CD50 level of penicillin became 800 mg. per kilogram and the CD90 dose, 4,000 units per kilogram, one fifty-fifth and one twentieth of the corresponding curative levels of penicillin used alone.

In the second series the curative action of penicillin was enhanced by small subcurative doses of mapharsen even when the penicillin was administered in 5 injections daily at four-hour intervals for a total of 20 injections. The CD50 and the CD90 dosages of penicillin alone in this schedule were 1,850 and 8,400 units per kilogram, respectively. The daily injection of 0.4 mg. per kilogram oxophenarsine hydrochloride over that same period reduced the CD50 dosage to 30 and the CD90 dosage to 1,000 units per kilogram, one-sixth and one-eighth of the corresponding curative doses of penicillin when used alone.

The authors concluded that since penicillin and mapharsen are synergistic in experimental syphilis, they may well be synergistic in men. Under such circumstances, small amounts of penicillin supplemented by subcurative doses of mapharsen would be as effective as much larger doses of penicillin used alone. And more important, the proportion of treatment failures in early syphilis cases not cured by penicillin alone may be significantly reduced by using mapharsen and penicillin in conjunction.

The authors suggest that if penicillin and bismuth prove to be similarly synergistic, the optimum therapy for human syphilis may well consist of penicillin, mapharsen, and bismuth used in combination.

Regarding the Unusual Effect of Penicillin Therapy Upon the Uterus. Mortimer D. Speiser and Evan W. Thomas, Journal of Venereal Disease Information, Washington, 27:9-20 (Jan.), 1946.

Upon reviewing the records of 156 prenatal patients and investigating 1,400 nonpregnant women treated with penicillin, the authors found no evidence that penicillin therapy produced contractions of the uterus or uterine bleeding.

Among the 156 prenatal patients were 5 patients who showed some aberration from the usual course at a variable period of time after treatment; in only 1 patient was there any question regarding the possible effects of penicillin treatment upon the pregnant uterus and there it was highly doubtful.

On the premise that no known single drug without an endocrine effect is capable of producing uterine contractions as well as causing intermenstrual bleeding, the authors investigated the episodes of uterine bleeding occurring in nonpregnant women while under penicillin therapy. Penicillin therapy was given to over 1,300 women without any menstrual abnormality being noted which could be attributed to the effects of such therapy. Also, 100 patients under penicillin treatment for early syphilis were accurately studied, and in only one instance was any alteration from the usual cycle found. In this patient bleeding recurred six days after a previous normal period.

The authors conclude that in the few reported cases of both abortions and intermenstrual bleeding in association with penicillin therapy, some associated pathologic process may have accounted for such episodes, namely an associated cervical erosion, endometritis, salpingitis, ovarian cysts, or uterine neoplasms.

DEATHS*

Dr. E. Y. Anthony, Omaha, Texas, died January 23, 1946, at his home following several months of illness.

Dr. Anthony, son of Nicholas and Emma Anthony, was born in Tuscumbia, Ala., November 14, 1870. He studied medicine in Louisville, Ky., and Nashville, Tenn., later taking postgraduate work in Fort Worth. He passed the State Board examination in 1903 and began practicing in Omaha, where he was active for forty-one years.

Dr. Anthony had been since 1908 a member of the State Medical Association and American Medical Association through the Morris County Medical Society and had served the latter organization as secretary for thirty-one years. He had been a member of the Selective Service examining board during the recent war until his health failed.

Surviving are his wife, Mrs. Ella Anthony, whom he married in 1896; one daughter, Mrs. Allie Baird, Omaha; one grandson, Lt. Jack Baird; and one great grandson, Bob Baird, New York City.

Dr. Edwin Lee Burton, McKinney, Texas, died at his home January 19, 1946, following a heart attack.

Born near Millageville, Ga., in 1865, Dr. Burton was the son of Dr. Edwin Lee and Mollie (Johnson) Burton. His father was a surgeon in the Confederate Army, serving under General Robert E. Lee. In 1868 the family moved to Texas, locating in Grayson County. Dr. Burton attended the public schools in Paris and Grayson College. He received his medical degree from the Kentucky School of Medicine in 1889, where he was awarded a gold medal for excellence in general therapeutics. He practiced for a brief period in Rockwall County, Texas, and then in Dallas before moving to McKinney in 1891. He early began specializing in eye, ear, nose, and throat, and took postgraduate work in that field in New Orleans and New York.

DR. EDWIN LEE BURTON

Dr. Burton was a charter member of the State Medical Association through the Collin County Medical Society, and had served the latter as president

*An obituary ordinarily will not be published more than four months after date of death. Cooperation in reporting deaths of physicians and in furnishing appropriate biographical material promptly is solicited.

and as secretary. He was a member of the American Medical Association, a diplomate of the American Board of Otolaryngology, and a charter member of the Texas Ophthalmological and Otolaryngological Society. He was medical examiner for service men in the Spanish-American and first and second World Wars. He was a member of the Methodist Church, a Scottish Rite thirty-second degree Mason, and belonged to various civic and hunting and fishing clubs.

On December 15, 1897, Dr. Burton married Miss Lizzie May Duer, of McKinney, who survives. Also surviving are three sons, Dr. Edwin Burton, Charlottesville, Va.; Grover Burton, McKinney, and Duer Burton, Fort Worth; two brothers, W. T. Burton, Bells, and A. Burton, Bonham; and one sister, Mrs. Stella Moor, Bonham.

Dr. Louis Lee Edwards, San Marcos, Texas, died of coronary thrombosis January 14, 1946, near Hebbronville while on a hunting trip.

The son of Mr. and Mrs. Charles G. Edwards, Dr. Edwards was born December 7, 1881, in Bexar County. He secured his academic education in the public schools of San Antonio and at the San Antonio Normal College. His medical education was obtained at the Memphis Hospital Medical College, Memphis, Tenn., from which he was graduated in 1910. He interned in the Memphis City Hospital and later did postgraduate work at New Orleans, Chicago, and New York. In June, 1910, Dr. Edwards began practicing at San Marcos and remained in that community until his death, continuing actively in the practice of general medicine and surgery until failing health forced his retirement just a week before his death. He served on the staff of the Soldiers and Sailors Memorial Hospital.

DR. LOUIS LEE EDWARDS

Dr. Edwards had been continuously since 1912 a member of the State Medical Association and American Medical Association, first through the Hays County Medical Society and, after its organization, the Hays-Blanco Counties Medical Society. He was also a member of the Seventh District Medical Society and was a fellow of the American College of Surgeons. Dr. Edwards took an active interest in religious activities and had served thirteen years as president of the board of stewards of the First Methodist Church, San Marcos, of which he was a member. He was a thirty-second degree Mason, and a member of the Shrine. He led in organizing the San Marcos Kiwanis Club, which he served as first and second president, and was a member of the Chamber of Commerce. He was a stockholder and director in the Texas Power and Light Company.

Dr. Edwards married Miss Myrtie Lee Norris on October 8, 1902, at what is now Summerset, Texas. Mrs. Edwards and two half sisters, Mrs. Richard Lancaster, Summerset, and Mrs. Florence Lewis, Pasadena, survive.

Dr. Stirling Everett Russ died January 1, 1946, at his home in San Antonio, Texas, of heart disease.

Dr. Russ was born November 20, 1906, in San Antonio, the son of Dr. Witten B. and Jean C. Russ. His preliminary education was received in the New Mexico Military Institute at Roswell, N. M., and the University of Texas, Austin. His medical education was obtained at Baylor University College of Medicine, from which he was graduated in 1932. After his graduation he served a one year internship and a one year residency in the Medical and Surgical Hospital, San Antonio. With the exception of his service in the Medical Corps of the Army of the United States during World War 2, he had since practiced surgery in partnership with his father in San Antonio.

DR. STIRLING E. RUSS

Dr. Russ had been continuously a member of the Bexar County Medical Society, State Medical Association, and American Medical Association during his professional life. He was a Fellow of the American Medical Association, the American College of Surgeons, and the Texas Surgical Society. He served the State Medical Association of Texas as secretary of the Section on Surgery in 1936. During his professional career in San Antonio, he had served on the staffs of the Medical and Surgical, Robert B. Green, Santa Rosa, and Nix Hospitals.

Dr. Russ entered active service in World War 2 on November 20, 1940. He was first stationed at Camp Stewart, Ga., being sent from there to Fort William D. Davis, Canal Zone, at which post he was stationed for nineteen months. He was then returned to this country as a patient with tropical malaria. His next assignment was William Beaumont General Hospital, El Paso, following which he served as assistant chief of the Surgical Service, Ashburn General Hospital, McKinney. He was then transferred to the Station Hospital, Camp Hood, and was separated from the service on December 2, 1945.

Dr. Russ was a member of Kappa Alpha academic fraternity, Alpha Mu Pi Omega medical fraternity, the American Legion, and was a Mason.

Resolutions expressing the high esteem in which he was held by his fellows were adopted by members of the Bexar County Medical Society on the occasion of his death. These resolutions pointed out that Dr. Russ was a war casualty just as certainly as if he had been killed on the field of battle; that after having been invalided home with tropical fever, he had reported for duty again without being fully recovered. After five years of service in the Medical Corps of the Army, in which he held the commission of major, he returned to civilian life December 2,

1945. During a comparatively short professional career, he had attained distinction in his specialty of surgery and had won the esteem and confidence of his fellows. His last contribution to medical literature was a report of a case of spontaneous rupture of a malarial spleen, published in the March 31, 1945 *Journal of the American Medical Association.* He had made several important contributions to surgical literature.

Dr. Russ is survived by his wife, the former Miss Larita Scoggin, to whom he was married September 26, 1928, in Fort Smith, Ark. He is also survived by his parents, Dr. and Mrs. W. B. Russ, and a brother, A. M. Russ, all of San Antonio.

Dr. Billy True Wickens, Strawn, Texas, died in the European theater of operations November 5, 1944, of wounds received in action.

Dr. Wickens was born in Electra, February 7, 1913. He attended Weatherford College and the University of Texas, receiving his bachelor of arts degree from the latter institution in 1937. He obtained his medical degree from the University of Texas School of Medicine in 1940. While a student, he was an assistant in anatomy at the school of medicine. He served an assistant residency at John Sealy Hospital, Galveston, in 1941, and an internship at Scott and White Hospital, Temple, in 1941-1942. He began active duty with the Army of the United States on May 30, 1942, as a first lieutenant in the Medical Corps, being promoted to the rank of captain prior to his death.

Dr. Wickens was a member during 1942 of the State Medical Association and the American Medical Association through the Bell County Medical Society. He was a member of the Methodist Church.

Dr. Wickens was preceded in death by his wife.

Dr. John Holt Sewell, Fort Worth, Texas, was found dead of a heart attack at his home January 9, 1946.

Dr. Sewell, son of Alfred and Anne Sewell, was born December 10, 1885, at Jacksboro, where he attended the public schools. He attended the University of Texas in Austin receiving a degree in electrical engineering in 1908. He taught school for one year at Mansfield, and while living there in the home of Dr. W. B. McKnight decided to study medicine. He was the first student ever to be admitted to Johns Hopkins University School of Medicine with an electrical engineering degree, but was graduated there in 1914. He served an internship at Bay View Hospital in Baltimore, and then returned to Fort Worth to practice. Since 1929 he has been associated with the Cook Memorial Hospital as internist.

DR. JOHN HOLT SEWELL

Dr. Sewell was a member throughout his professional life of the Tarrant County Medical Society, State Medical Association, and American Medical Association. He was also a member of the Texas Club of Internists. He was a member of the Fort Worth Club and Rivercrest Country Club.

Surviving Dr. Sewell are his wife, the former Miss Edna Loane, whom he married in Baltimore September 16, 1912; two sons, Dr. Robert Loane Sewell, Fort Worth, and John Holt Sewell, Jr., now a student at Johns Hopkins University School of Medicine, Baltimore; one brother, Dan Sewell, Jacksboro; and three sisters, Mrs. George N. Atkinson, Shamrock; Mrs. T. B. Cox, Athens; and Mrs. J. W. Hampton, Ranger.

Dr. **Robert Lawson Hargrave** died January 29, 1946, at his home in Wichita Falls, Texas, of angina pectoris and cirrhosis of the liver.

The son of Eldridge Glen and Marium Elizabeth (Chapman) Hargrave, Dr. Hargrave was born in Hopkins County, Texas. He attended the schools of that county and Central College at Sulphur Springs. His medical education was obtained at Tulane University, New Orleans, from which he was graduated in 1906. Dr. Hargrave practiced at Dike, Sulphur Springs, and Quanah before moving to Wichita Falls in 1913. He remained in Wichita Falls the remainder of his life but had retired from active practice in 1940 because of ill health.

DR. ROBERT LAWSON HARGRAVE

Dr. Hargrave in March, 1914, helped establish the Amason-Hargrave Hospital. The building is now used for student nurses of Wichita General Hospital. In January, 1926, another shortage of hospital facilities resulted in the founding of the Hargrave-Walker Hospital, which Dr. Hargrave served as first president. After ten years of operation this hospital was taken over by the Sisters of the Holy Family of Nazareth and is now operated as Bethania Hospital. After sale of the hospital, Dr. Hargrave entered a partnership with his son, continuing to practice in that capacity until his retirement.

Dr. Hargrave had been throughout his career a member of the State Medical Association and American Medical Association, through the Hopkins, Hardeman, and Wichita Counties Medical Societies. In 1942 he was elected to honorary membership in the State Medical Association. He was also a member of the Southern Medical Association.

Dr. Hargrave married Miss Anna T. Johnson, of Wichita Falls, on January 14, 1922. He is survived by his wife; one son, Lt. Col. Robert Lee Hargrave, M. C., U. S. A., Northington General Hospital, Tuscaloosa, Ala.; one sister, Mrs. T. H. Brady, Commerce; and two brothers, J. Wheeler Hargrave, Tira, and Thomas M. Hargrave, Antlers, Okla.

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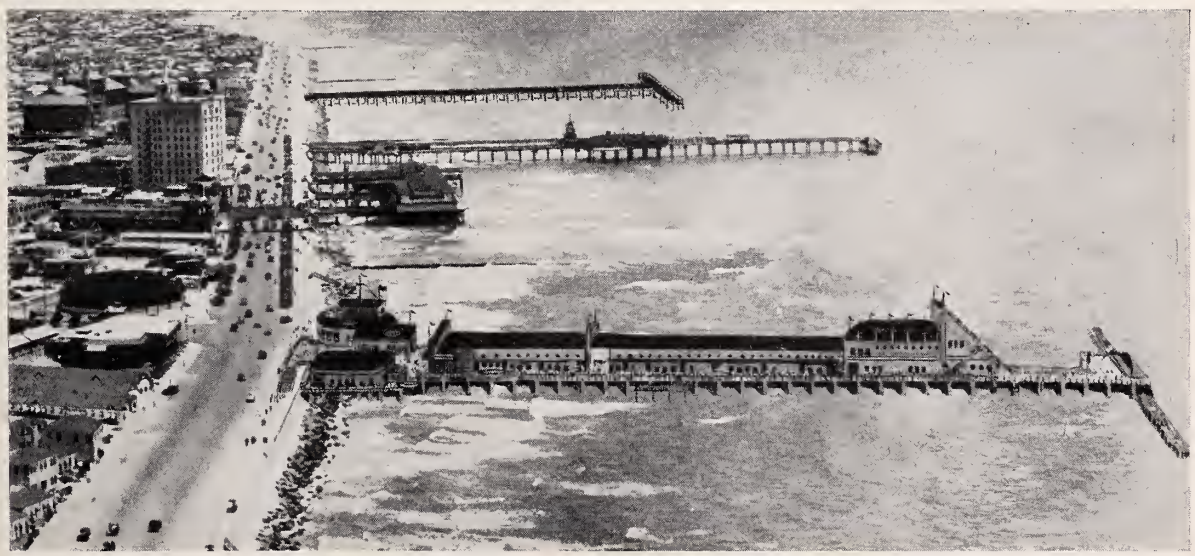
Vol. XLI **April, 1946** **No. 12**

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

The Galveston Annual Session will be held, finally, May 6, 7, 8, and 9, 1946, to state it exactly. It will be a full-dress affair, in the sense that all of the desirable features of the meetings as they have been developed through the years will be included in the program, with here and there additional features believed to be attractive.

It will be recalled that all of this had been planned for last year, but that because of governmental restrictions it could not materialize. The Galveston County Medical Society, and the officers of the scientific sections, not to mention others who labored faithfully to prepare a program for last year, were disappointed, of course, but there was nothing anybody could do about it. We should appreciate the double-header efforts of the management, and above all, we should remember that the Galveston County Medical Society and the Galveston people have carried on with the distinct understanding that they will do their best with the material and opportunities available, or which can be made available, and that's all anybody can do. We mention this fact in the beginning not as an apology but as an explanation. As a matter of fact, we do not expect that there will be anything for which the management should apologize, and very little to explain. The meeting is going to be the success we have dreamed up for it.

In our editorial approach to the problem of the annual session in 1942, we had this to say: "In the midst of a war-torn world, Medicine marches on. Indeed, it is the responsi-



Galveston, showing the municipal pleasure pier and seawall boulevard.

bility of the medical profession now more than in peace to keep itself apprised of the latest scientific advances in medicine, in order to render the highest type of medical care," etc. We would like to make that same approach, substituting the words "it is the responsibility of the medical profession now more than in war." We have not time to develop the thought further. Our readers will understand, we are sure.

The lay-out at Galveston is practically what it was the last time we met there, which has simplified the matter of preparation quite a bit. Headquarters, meaning the Office of Registration and Information, and the technical and scientific exhibits, will be housed in the Hotel Galvez, and all of the scientific sections will meet there, with the exception of the Section on Pediatrics and the Section on Public Health, both of which will meet at the Buccaneer Hotel, approximately the distance of two short blocks away. In fact, all of the General Meetings of the Association, the Clinical Luncheons, and the Combined Sections Meeting will take place at the Hotel Galvez. The Clinical Pathologic Conference to be conducted by the Section on Clinical Pathology, will be held in Room 207, the pathological lecture room, of the Laboratory Building, at the Medical College, which room is fully equipped for the purpose. This is but a short distance away. The necessity for removing this conference from the center of things is incident to the prospective need of special equipment and much more space for the conference than can be found at either of the beach hotels being used for the scientific meetings. It is anticipated that a good many doctors in general practice, as well as specialists, will want to attend this conference. The Tuesday meeting of the Section on Clinical Pathology will be held in the Directors' Room, Lobby Floor, Hotel Galvez.

A study of the schematic drawing accompanying the published program (page 641) will be very helpful in locating meetings.

The Woman's Auxiliary will hold all of their meetings at the Buccaneer Hotel. They will, of course, join with us in the Opening Exercises, Memorial Services, and the President's Reception and Ball, at the Hotel Galvez. Their headquarters and place of registration will be located on the Mezzanine Floor of the Buccaneer. The entire program of the Woman's Auxiliary is published in this number of the JOURNAL, along with the program of our meetings. However, their program will not be included in our program reprints, it will be printed separately, and in more convenient form to women.

Hotel accommodation at Galveston continues to be the outstanding and most disconcerting problem connected with the annual session. As a matter of fact, or at least we are so assured, there will be plenty of bedroom accommodations at Galveston, provided we will agree to the temporary inconvenience of sharing with each other the rooms at the hotels, and accepting accommodations at cabins, courts, and in private homes. We know it to be a fact that the committee in charge of housing has been most active, and is working the problem on a mathematical basis. The committee is playing no favorites. It has all along been a matter of first come, first served. Dr. E. S. McLarty, 22nd and Avenue "I", Galveston, is chairman of this committee. He is notoriously long-suffering and patient. Complaints about housing are not valid until they have been registered with him.

It is important to note that the usual independent but related organizations will meet at Galveston, on Monday, May 6. This year the group will comprise the following: Texas Railway and Traumatic Surgical Association; Texas State Heart Association; Texas Neuropsychiatric Association; Texas Society of Gastro-Enterologists and Proctologists; Texas Association of Medical Anesthetists; Texas Chapter, American College of Chest Physicians, and Conference of City and County Health Officers. The programs of these meetings are published along with the program of our own meetings, both in the JOURNAL and program reprints.

As heretofore, at least in late years, emphasis is being placed upon the General Meetings, the Clinical Luncheons, and the Combined Sections Meeting. Our Honor Guests will be featured in all of these meetings. They will present addresses at scientific section meetings and at the general and combined sections meetings, and will be prepared to answer questions at the clinical luncheons, which questions will come from those in attendance on the luncheons. The questions can be prepared in advance, or on the spot.

Our President and our Council on Scientific Work, are very proud of the list of Honor Guests for the annual session this year, considering our late start. It will be remembered that physicians of the type desired in this connection are very much in demand all over the country, and that the demand is heaviest at this time of the year. The list of our Honor Guests follows:

HONOR GUESTS

Reginald M. Atwater, M. D., Dr. P. H., New York, N. Y., Executive Secretary, American Public Health Association.

M. Herbert Barker, M. S., M. D., F. A. C. P., Chicago, Ill., Assistant Professor of Medicine, in charge

of Hypertension and Renal Clinics, Northwestern University Medical School.

O. Theron Clagett, M. S., M. D., F. A. C. S., Rochester, Minn., Instructor in Surgery, Mayo Foundation, University of Minnesota Medical School; Surgeon, Colonial and St. Mary's Hospitals.

Nicholson J. Eastman, M. D., Baltimore, Md., Professor of Obstetrics, Johns Hopkins University School of Medicine; Obstetrician-in-Chief, Johns Hopkins Hospital.

Wiley D. Forbus, M. D., Durham, N. C., Professor of Pathology, Duke University School of Medicine; Pathologist, Duke, Watts, and Lincoln Hospitals; Associate Editor, Archives of Pathology.

Jack S. Guyton, M. D., Baltimore, Md., Associate Professor of Ophthalmology, Johns Hopkins University School of Medicine; Assistant Director, Wilmer Ophthalmological Institute, Johns Hopkins Hospital.

Mr. Jay Ketchum, Chicago, Ill., Director of Division of Prepayment Medical Care, Council on Medical Service and Public Relations, American Medical Association.

Robert J. Reeves, M. D., Durham, N. C., Professor of Roentgenology, Duke University School of Medicine.

James L. Wilson, A. B., M. D., Ann Arbor, Mich., Professor of Pediatrics, University of Michigan Medical School; Chairman, Department of Pediatrics and Communicable Diseases, University Hospital of Michigan.

The wartime Presidents of the State Medical Association and of the Woman's Auxiliary, will be presented at the joint Opening Exercises on Tuesday morning, May 7. It will be remembered in this connection, that the Woman's Auxiliary has, through a provision of its Constitution, been able to elect a president each year during the war. The State Medical Association was able to elect a president each year of the war except the year 1945, and one of these, Dr. Judson Taylor, is deceased.

The Memorial Services will, as usual, be held at 5:15 p. m., Tuesday, May 7. The services will be in charge of Dr. W. L. Crosthwait of Waco, who will deliver the Memorial Address for Physicians. The Woman's Auxiliary, also as per custom, will participate in these services. Mrs. P. R. Denman, of Houston, will deliver the Memorial Address for the Auxiliary. The names of deceased members of both the Woman's Auxiliary and the State Medical Association will be read at these services.

The Scientific and Technical Exhibits, as we have already said, will be displayed on the Lobby Floor of the Hotel Galvez. Considering the late start made in assembling these exhibits, the results have been exceptionally fine. The Scientific Exhibits will be reduced somewhat in number, for obvious reasons, but every inch of floor space available for the Technical Exhibits has long since been contracted for, and there is a long waiting list. We are publishing a list of these exhibits with our program. Many of our old, tried and true friends will be found among the list, and many of those in charge of these exhibits have been with us so constantly and for such a time, that they have been practically accorded the distinction of membership in our Association.

The entertainment features of this, the first all-out annual session the State Association has had since 1942, will be restricted somewhat because of the circumstances presenting.

We understand that the Texas Railway and Traumatic Surgical Association will entertain rather generally, and as always generously, on Monday evening of the meeting.

The President's Reception and Ball will be held on Tuesday evening, and there are rumors of embellishments.

There will be no fixed, announced mass entertainment otherwise. The only time available for such an entertainment would be on Wednesday night, and that is the time that the bulk of the business of the House of Delegates will be transacted. It is highly desirable that there be no counter-attractions at that time, hence the request of the management that no mass entertainment be attempted on that evening. We emphasize the announcement because of the disposition to be a wee bit critical of our hosts when they do not get out on the entertainment limb. For years the Association has seriously suggested to our hosts that the entertaining medical society might well be spared the trouble and expense of such entertainment. The need of concentrating on the work of our House of Delegates at this particular time makes it all the more important. Again we must admit that there are rumors.

As per custom, also, the period of time from 6:00 to 8:30 p. m. on Tuesday has been set aside for alumni and special group banquets, and the period of time from 6:30 to 7:45 p. m. on Wednesday has been set aside for fraternity banquets. At this writing, one alumni banquet, and several fraternity banquets have been scheduled. Doubtless more will follow.

It is worth while to glance at the write-up of Galveston, published in this number of the JOURNAL (beginning on page 636). It will be most interesting to all, and perhaps a bit nostalgic to many.

A special letter of welcome and invitation has come to us from Dr. Chauncey D. Leake, Dean of the University of Texas Medical Branch, which we deem of sufficient importance to publish here in full:

"On behalf of the members of the staff of the University of Texas Medical Branch, I am extending

to you a hearty welcome to Galveston. We are glad that you are coming, and we hope that you will have a pleasant and profitable visit. We hope particularly that you will take an opportunity to visit the Medical Branch. We hope that you will come around to see some of the things that we are doing. We would like particularly to tell you about some of the ways in which we may be able to serve you professionally. We are always at your service for such information and advice as you may think we can give. Please write to the departments concerned with regard to such matters as may interest you.

"Whenever you are in Galveston, we hope that you will take the opportunity to visit some of our clinics. We have many general regular sessions during the academic year that may be of interest to you.

"The Physiology Seminar meets in the Psychopathic Hospital each Monday noon. The Pediatric Grand Rounds are held at 10:00 a. m. Tuesdays, in the Children's Hospital. The regular Clinical Pathological Conference is held in the main Laboratory Building at 3:00 p. m. on Tuesdays. On Wednesdays the Tumor Clinic meets in the Out-Patient Building, at 2:00 p. m. The Surgical X-Ray Conference meets at 1:00 p. m. on Thursdays at the Out-Patient Building. On Fridays, the Pediatric Seminar meets at the Children's Hospital at noon, and a light lunch is served. At 9:00 a. m. Saturdays, the Neuropsychiatry Grand Rounds are held in the Psychopathic Hospital. Each morning at 8:00, general clinics are held in Randall Hall in the Out-Patient Building. The Staff meets for its regular monthly meeting at 8:00 p. m. the first Tuesday of the month. You are welcome to attend any of these sessions that may be of interest to you.

"The libraries of the Medical Branch are available to you for reference and abstract work, or for the loan of monographic or periodic material, provided that you pay postage both ways, and provided that you keep the material for one week only. There are some 50,000 bound volumes in the libraries, with over 400 periodicals in complete file, and some 600 current journals.

"The Diagnostic Clinic is at your service for aid in the diagnosis and temporary management of difficult indigent cases. A professional referral letter should be sent to the Diagnostic Clinic in order to make arrangements for admission. It is necessary further that arrangements be made with a local agency to pay travel and non-hospital expenses while your patient may be in Galveston. Upon discharge, a summary of the patient's record will be sent to you.

"Frequent refresher conferences for postgraduate study are held at the Medical Branch. Arrangements to attend may be made through the director of the postgraduate training program. Selected members of the staff may be obtained for clinical sessions in connection with county or district medical society meetings. Special arrangements may be made for special courses in preparation for specialty board examinations.

"If you are interested in any of the services which the Medical Branch may render to you, please come around and talk to us about the matter. We are happy to welcome you to Galveston. We hope you will enjoy yourselves thoroughly, and we hope that you will come often."

Not Too Late to Pay Dues.—We think it is rather well known to our readers that dues are due on January 1, each year. County Medical Society reports are due April 1 each year. Nobody except county society secretaries need know who are members between January 1 and April 1. However, after the report of the county society secretary, on April 1, the fact of membership is definitely established. So is the fact of non-membership. The By-Laws permit the payment of dues at any time during the year, but there is no way to erase the fact that up until April 1, and until the time dues are actually paid, there is a period of non-membership. The period of non-membership until April 1 is known only to county society secretaries, and they don't have to tell.

The State Secretary will credit membership on county society reports as long as he can, and until these reports are made of permanent record, so that a non-membership period does not show. The State Secretary can receive dues only from the county society secretary, or the president of the county society in the absence of the secretary.

If a member wishes to pay dues at the place of registration, at the annual session, it will be necessary that he present the written permission of his county society secretary that he do so. In no other way can this be done, and the State Secretary neither made the law nor set up the regulation. He would be in violation of his obligation if he did otherwise. Should it happen that the county society secretary fails to send in the dues of a member in advance of the annual session, he can authorize the said member to pay his dues to the State Secretary, and the State Secretary will refund the money thus paid, if it is, by chance, paid in duplicate. That is the only way it can be done.

County Medical Society Library Building Fund.—From time to time we have published, in these columns, lists of contributions made by members of the State Medical Association, through their respective county medical societies, to a fund for the State Medical Association Library. It has been our effort thus to call attention to a very excellent plan of raising much needed money for a very fine purpose, and at the same time give credit to those who are thoughtful enough to make the contributions. Recently our Committee on Library Endowment has been shelling the woods in this connection, with fairly good results.

Along with the contributed money comes contributed ideas, and among these ideas is a very good suggestion. The suggestion is embodied in the title for this editorial, and it is just possible that the money being raised by county medical societies will be converted into an actual building fund, whereas heretofore the money has been used in the aggregate as an endowment fund, the interest from which has been spent in the support of the State Medical Association Library. Of

course, the Texas Memorial Medical Library Association, to which all of the contributions referred to have been made, and which directs the investment of the money and passes either the money or the interest thereon to the Library, in accordance with the terms of the donations, will be responsible for the policies and practices in this connection. In the meantime, there are those among our number who feel that there should be a Library Building Fund which cannot be diverted to any other purposes than erecting a Library Building and maintaining it subsequently. Therefore, and with the advice and consent of our Committee on Library Endowment, and our Librarian, Dr. R. B. Anderson, we are herewith accounting for all donations made through county medical societies, directly or indirectly, under the designation, "County Medical Society Library Building Fund." In order to make the matter official, however, the Texas Memorial Medical Library Association will have to take official action in the premises.

Since this particular campaign has gotten under way, a total of $1,478.00 has been raised. Of this total, $1,028.00 has been donated since March 1, 1946, as follows:

Bexar County Medical Society		
Dr. Alfred Breuer, San Antonio	$ 5.00	
Dr. Yone Soma, San Antonio	50.00	
Dr. I. C. Skinner, San Antonio	25.00	
Dr. Walter G. Stuck, San Antonio	100.00	
		$ 180.00
Brazos-Robertson Counties Medical Society		
Dr. J. E. Marsh, College Station	5.00	5.00
Cameron-Willacy Counties Medical Society		
Drs. Henrich and Annie T. Lamm, La Feria	10.00	
Dr. T. O. Andrews, Brownsville	3.00	
		13.00
Dallas County Medical Society		
Dr. M. F. Waldman, Dallas	5.00	
Drs. Paul C. Williams and T. W. Bywaters, Dallas	25.00	
Dr. G. D. Mahon, Dallas	50.00	
Dr. H. S. Aronson, Dallas	10.00	
J. A. Majors Company	500.00	
		590.00
Ector-Midland-Martin-Howard-Andrews-Glasscock Counties Medical Society		
Dr. J. K. Wood, Odessa	25.00	25.00
Galveston County Medical Society		
Dr. G. W. N. Eggers, Galveston	25.00	25.00
Harris County Medical Society		
Dr. Herman L. Gardner, Houston	10.00	
Dr. H. Caplovitz, Houston	5.00	
		15.00
Hidalgo-Starr Counties Medical Society		
Dr. Charles Mims, Mission	10.00	10.00
Jefferson County Medical Society		
Dr. H. B. Eisenstadt, Port Arthur	5.00	5.00
Medina-Uvalde-Maverick-Val Verde-Edwards-Real-McKinney-Terrell-Zavala Counties Medical Society		
Dr. Raul M. Montemayor, Eagle Pass	$ 5.00	
Drs. R. N. Graham and B. L. Burditt, Del Rio	10.00	
Dr. J. D. Williamson, Castroville	5.00	
Crystal Hospital, by Dr. Cary Poindexter	5.00	
Dr. Orin McMillan, Eagle Pass	5.00	
		$30.00
McLennan County Medical Society		
Dr. John Thompson, McGregor	10.00	
Dr. I. Warner Jenkins, Waco	5.00	
		15.00
Navarro County Medical Society		
Dr. L. E. Kelton, Jr., Corsicana	10.00	10.00
Potter County Medical Society		
Dr. J. B. White, Amarillo	25.00	25.00
Tarrant County Medical Society		
Dr. Harold J. Shelly, Fort Worth	10.00	
Dr. John J. Andujar, Fort Worth	30.00	
		40.00
Tom Green-Coke-Crockett-Concho-Irion-Sterling-Sutton-Schleicher Counties Medical Society		
Dr. R. L. Powers, San Angelo	15.00	15.00
Travis County Medical Society		25.00
		$1,028.00

The contribution of Dr. Walter G. Stuck of San Antonio, while made directly to the Library Building Fund, has been accounted for through the Bexar County Medical Society. The amount contributed is worth while, but of special importance is the contribution by Dr. Stuck of something like 5,000 reprints on orthopedic subjects which was made at the same time. These reprints will be filed in the Package Library of the State Medical Association, and will be most valuable, indeed.

A particularly significant contribution made to this Fund, is one by the J. A. Majors Company of Dallas and New Orleans, which contribution we have made of record under the Dallas County Medical Society caption, even though Dr. J. A. Majors, who owns the company, is not a member of the society. As a matter of fact, we are quite ready and willing to set this contribution up separately, and with emphasis, under its own banner, but in the meantime, it might be a good idea to encourage our friends with whom we deal commercially, whether or not at the same time medically, to come forth and do likewise. In his letter making the contribution, Dr. Majors advised that he felt it a "privilege to make a contribution to a building fund for the State Medical Association Library," and we are sure he feels just that way about it.

We are sure we can publicly and feelingly express the appreciation of the medical pro-

fession of Texas, of the above recorded contributions to our Library Building Fund.

Volume XLI Closes with this number of the JOURNAL. We have taken time out to look over the several numbers of the volume, and we are very well pleased, considering the circumstances under which the volume has been published. We hope our readers share this feeling with us, and even here and there exaggerate somewhat. Certainly there have been interferences and impedimenta enough to meet any craving for trouble. It has been necessary to conserve paper, and closely watch post office regulations. It was even necessary to carry the conservation of paper matter well into the future, and that in itself posed a problem difficult to solve. Our doctors have been returning to private practice rather rapidly, and the mailing list has been constantly increasing, particularly during the latter part of the volume year. Original articles of the standard required for our publication have been relatively scarce and hard to get. It has been difficult to induce our members to keep us supplied with news. For the first time in the history of our publication, we have had to soft-pedal solicitation of advertising, and sidestep subscriptions.

We acknowledge without reservation that the success of the JOURNAL during the past year has been because of a staff which has borne heavily against the yoke, and to understanding contributors, readers, and advertisers. We thank them all.

The volume now closing ran a total of 700 reading pages, as against a total of 672 reading pages in its predecessor, Volume XL. Our advertising pages this year have totaled 830, as against 776 last year.

The reading pages in Volume XLI may be broken down as follows: Editorial, 81; Original Article, 332; and Eight Point, 287. In the previous volume, the breakdown was as follows: Editorial, 76; Original Article, 349; and Eight Point, 247.

We feel that we should call the attention of our readers to the advisability of having their JOURNALS bound. We are not able to quote prices on bound volumes at this time. We will have to make quotations on application. Those who wish this service will be charged exactly what the bindery charges us, and we will furnish back numbers to the extent that they are needed and we have them. As will be surmised, we don't have a large reserve of back numbers. For years the binding for which we have contracted has been uniform, of an attractive red morocco with gilt lettering.

Dr. R. B. Anderson Ill.—Most of our readers will have learned by the time this reaches them, that Dr. R. B. Anderson of Fort Worth, Assistant Secretary-Editor, has suffered a coronary occlusion. Many of our readers will recall that he suffered a similar attack some eleven years ago. We are happy to report that the present attack is much less severe and dangerous than the other attack, and that Dr. Anderson is well on the road to recovery. At the present writing he is confined to the hospital, but he will shortly be allowed to start his convalescence at home.

The absence of Dr. Anderson from his desk at this critical time will be felt by all concerned, but a devoted office force will see to it that the effect of his absence is reduced to a minimum, considering the circumstances.

CURRENT EDITORIAL COMMENT*

Congenital Heart Disease.—Although the life expectancy of patients with congenital heart disease is not great and although the incidence of this type of disease in adults is low, being less than 1 or 2 per cent of all adults with organic heart disease, there is a likelihood that the poor prognosis may improve in the future.

Since in the past so many patients with congenital heart disease have died with subacute bacterial endocarditis, improved therapy for this disease will lead to better outcome of patients having this complication. Moreover, recent advances in vascular surgery in specific types of congenital heart disease have resulted in cures or improvement in these specific instances. Therefore, it is imperative that physicians become familiar with the lesions amenable to surgical assistance and know the diagnostic criteria for these particular lesions. The old diagnosis of "congenital heart disease" must be qualified as to specific type of involvement if the patient is to profit from recent improvements in therapy.

Among the common types of congenital heart disease without anoxia are patent ductus arteriosus, septal defects, and coarctation of the aorta. With the advent of surgical ligation of the ductus, as first successfully done by Gross and Hubbard, the prognosis has improved in skilled hands in preventing and curing subacute bacterial endocarditis. In this lesion the chief diagnostic criterion is a continuous machinery-like murmur, loudest during the latter part of systole,

*This department of the JOURNAL presents editorial comments on current items pertaining to the science, art and practice of medicine, contributed by members of the State Medical Association and scientists closely associated with the medical profession of Texas. Invitation is hereby extended to any member of the State Medical Association of Texas to submit such discussions for this department. The discussions should not be more than 500 words in length.

located in the left second intercostal space adjacent to the sternum and often just medial to the left midscapular region, often accompanied by a systolic thrill in the pulmonary area.

Clarence Crafoord, of Stockholm, and others have now made successful end to end anastomosis of the aorta after removing coarctation, tending to preclude complications and leading to better prognosis. Palpation of femoral arterial pulsations should be a routine procedure in any patient in whom hypertension is found, especially if there is a basal systolic murmur. If there is any question, blood pressure should be checked in the lower extremities. Pulsating superficial arteries around the scapulae and notching of the lower margins of the ribs as seen on roentgen study are further diagnostic criteria of coarctation. Patent ventricular septum (Roger's disease) as yet is not amenable to surgical aid.

Of the types of congenital heart disease with anoxia, the tetralogy of Fallot, in which there is pulmonary stenosis or atresia, has been helped surgically by an operation devised by Blalock and Taussig, following which there was better aeration of blood but, of course, not correction of the multiple lesions. In these cases a loud systolic murmur is heard over the entire precordium, loudest at the pulmonary area and usually accompanied there by a systolic thrill, right ventricular enlargement, right axis deviation in the electrocardiogram, compensatory polycythemia, and clubbing of the fingers as well as cyanosis. The Eisenmenger complex differs in that there is no pulmonary stenosis although there may be pulmonary insufficiency. In this case the systolic murmur is loudest in the midprecordium, possibly accompanied by a diastolic pulmonary murmur.

In view of recent development of surgical procedures of value in certain types of congenital heart disease, possibly life-saving at times, physicians must become better acquainted with their diagnostic criteria.

GEORGE M. JONES, M. D.,
Department of Internal Medicine, Southwestern Medical College, Dallas, Texas.

Medical Arts Building.

Tuberculosis is intimately linked with nutrition, both because the disease is common under famine conditions, and because an individual's lowered resistance is connected with appetite disorders and wrong dietetic habits. One-third of tuberculous people cannot obtain a proper diet on account of inadequate income. Better nutrition for all will enable the community to shoulder the burden of its tuberculosis and gradually diminish the weight of that load.—NAPT Bull., England, June, 1945.

THE FUTURE OF THE TEXAS MEDICAL CENTER

E. W. BERTNER, M. D.
President, Board of Directors, Texas Medical Center
HOUSTON, TEXAS

Every generation or so in the life of a great city a chain of circumstances pulls wide the door of major opportunity for that city's advancement. Such an opportunity brought to Houston its great seaport. It is unnecessary to recount here the immense advantages that accrued to our city and state through the development of that opportunity.

It is not amiss to draw an analogy between the Houston Ship Channel and what the Texas Medical Center will be. The great vision that prompted the dream and the realization of the enduring benefits to the community and to the South and Southwest of the Houston Ship Channel is paralleled in the vision of the Texas Medical Center. One made Houston's place as a trade center; the other will make Houston's place as a health center. One brought great commerce; the other will bring great blessings to mankind, and perhaps, who knows, bring the answer to the cause, treatment, and cure of cancer. The Ship Channel brought and is bringing economic benefits and captains of industry to our people; the Texas Medical Center will attract the great scientists of the world, will benefit suffering humanity, avert much illness because of great preventive work, and will contribute to the economic development of this section. Construction of many millions of dollars of fine buildings is such an obvious asset to the city that it needs no build-up from me, but I invite consideration of this point and my comparison of the Center to the development of our great port as an economic stride of major importance.

Colonel George A. Hill, Jr., has given a picture of the origin and planning of the Texas Medical Center which reveals the chain of circumstances that made this evening's event possible. I shall try to give a preview of the future of the Center.

So that there may be understanding and appreciation of the vast possibilities inherent in this project, I shall quote the statement of purposes direct from the charter of the Texas Medical Center, as it was incorporated by the State:

"This corporation is formed exclusively for benevolent, charitable, and educational purposes, and to such extent as may be proper to achieve any of the above stated purposes:

"To promote and provide for or assist in the establishment, support, and maintenance of facilities for medical, dental, and nursing education and other phases of health and medical education, for hospitalization and treatment of the sick and afflicted,

Read at the dedication of the Texas Medical Center, Houston, Texas, February 28, 1946.

and for research in the field of health and science of medicine and dentistry;

"To promote and provide for or assist in the establishment, support, and maintenance of medical schools, dental schools, schools of public health and nursing, hospitals, and clinics; and to provide facilities and financing for housing of students, faculty members, and employees of all and any of such institutions;

"To promote, provide for, or assist in the establishment, support, and maintenance of a general health program for the State of Texas, as well as special health programs for the State of Texas;

"To join with and assist other institutions organized and operated exclusively for any one or more of the purposes herein stated;

"To make awards, give prizes, grant scholarships, publish reports, and engage in research;

"To accept and administer gifts, donations, and bequests, whether of money, personal property, or real estate, and otherwise to accumulate, administer, and disburse funds to advance or achieve any of the above stated purposes."

Surely upon such a broad, humanitarian foundation we can build here a noble and notable contribution toward the advancement of civilization, with the help and support of the citizens of Houston and all Texas.

It gives me great pride to report now the institutions which have already decided to become a part of this development and to tell as briefly as possible some of the functions that will be performed in the Texas Medical Center.

Four great colleges have joined us: Baylor University, Rice Institute, the University of Houston, and the University of Texas.

The hospitals that will participate in the program are: the present Hermann Hospital, with plans of expansion to include a large additional hospital building, with an affiliated Urological Hospital; Children's Hospital, in association with Arabia Temple; a Psychosomatic Pavilion; a Maternity Pavilion; as well as a large Professional Building which will house the doctors and dentists practicing in the Center; St. Luke's Episcopal Hospital; the M. D. Anderson Hospital for Cancer Research; the Methodist Hospital; the Tuberculosis Hospital; the Marine Hospital; a large Convalescent Hospital; a Hospital for Chronic Diseases and the Aged; the United States Naval Hospital; and the United States Veterans Hospital.

Each of these hospitals will participate in

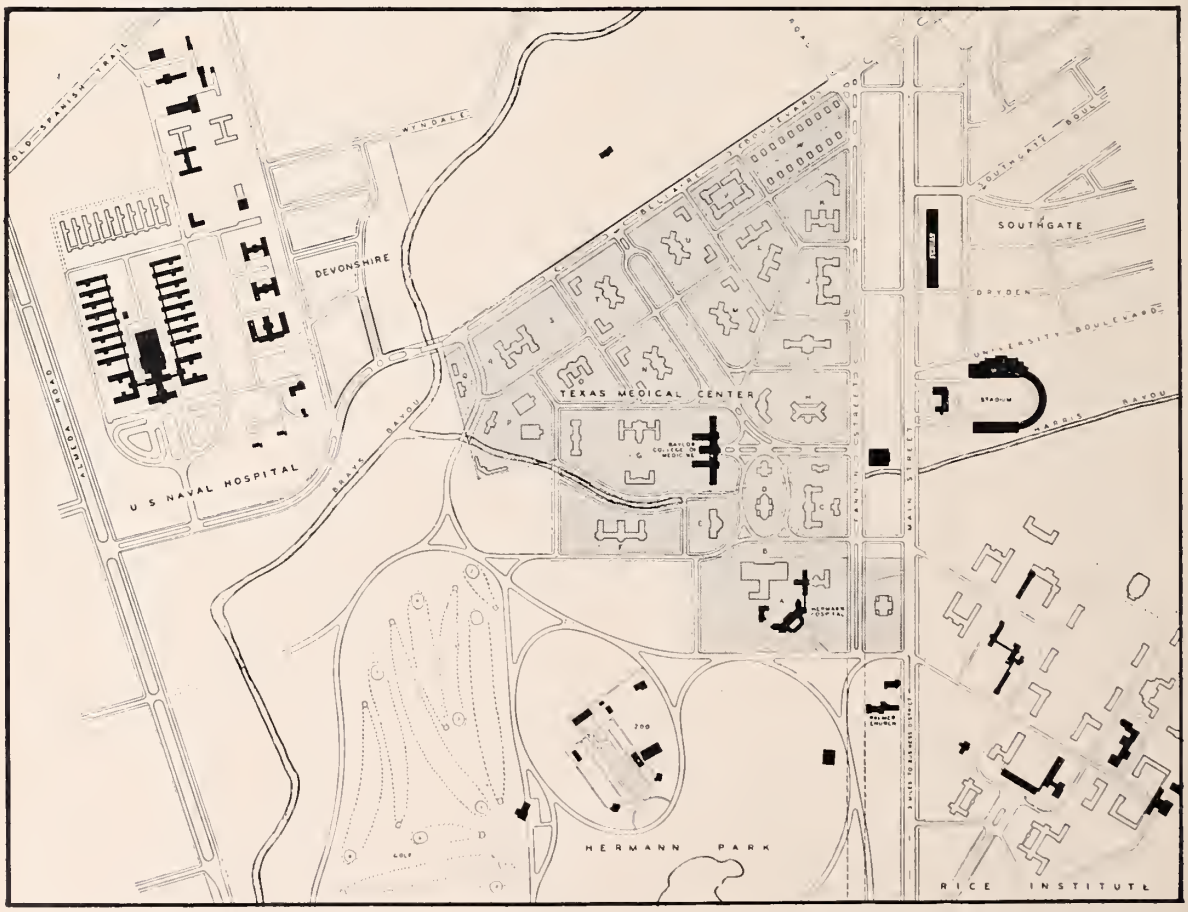


FIG. 1. Texas Medical Center and vicinity. The shaded area shows the extent of the ground which comprises the Center proper. Buildings in black are either constructed or under construction.

all phases of education, research, and treatment.

At this point I would like to pay tribute to one of the outstanding surgeons of Houston who spent the greater part of his life in improving facilities for the training of younger men in surgery. This man was my good friend, the late Dr. Judson L. Taylor, for whom a memorial has been established in the form of the Judson L. Taylor Foundation, which will utilize its resources in making available advanced surgical training for young men.

Baylor University will operate the School of Medicine, in which an expansive undergraduate medical program will be carried on; researches in all phases of medical science, and research in medical education.

Rice Institute will coöperate with the units of the Center in research.

The University of Houston will administer a central school of nursing, in which the combined program will include each individual hospital, each hospital serving as a training center, but all nurses will be given the advantage of training in every unit of the Center; an extensive postgraduate training program in the nursing fields; a training program for hospital administrators; a training program in advanced courses in health education for teachers in rural areas and for those specializing in health education, as well as a training school for social workers.

The University of Texas will participate fully in the M. D. Anderson Hospital for Cancer Research, created by the 47th Legislature as the State Cancer Hospital, in which unlimited clinical and fundamental research and treatment will be carried out in coöperation with the Medical School, the Main University, the Dental School, and other units of the Center. In addition, there will be a broad educational program in which affiliation will be maintained with the American Cancer Society, the American College of Surgeons, and similar organizations which are contributing much to the education of the public in the importance of early diagnosis of this devastating disease. There will be a broad undergraduate program in which medical and dental students, nurses, and medical case workers will receive training. Postgraduate training will apply to physicians, dentists, nurses for specialized service, public health workers, research workers, and hospital administrators. Tissue and autopsy service will be available for indigent patients throughout the state.

The University of Texas School of Dentistry will provide a complete and enlarged Dental Branch, affording the finest program obtainable for training dentists, dental technicians, and dental nurses, with a special public health and research service program that will reach into all schools and hospitals. A postgraduate program will cover all of the specialties in dentistry.

This is a particularly fitting time, in view of the current interest in public health matters in Houston, to say that the University of Texas School of Public Health will be a very important part of the Texas Medical Center. Through this program specialists will be trained for every phase of public health work from administrators to vermin and rodent control experts.

For the first time in Texas there will be, under the University program, an adequate Institute of Geographic Medicine to assist us in meeting the problems in health that are arising out of worldwide travel and intercommunication between all continents.

Since none of us is getting any younger, I think there will be considerable interest in the proposed Institute of Geriatrics. In plain language, this is the study of causes and treatment of diseases of old age. In this endeavor we can probably further the researches of the Russian scientist who advocates prolonging life to one hundred and fifty years, during which time persons maintain their mental and physical faculties. We wish signal success for this program.

I do not want to be too technical this evening, so under the very important Institute of Biological and Pathological Research I shall say only that it would be nearly impossible to exaggerate the importance of this institution in the lives of all of us. An enlarged opportunity to our medical students and doctors for study in the division of pathology, in the division of bacteriology and immunology, and the division of allergy, will improve the quality of medical service for generations to come.

There will be in operation a Central Medical and Diagnostic Clinic, covering the admission, examination, diagnosis, and distribution of all indigent patients who are admitted to the Center. This clinic will house a Central Service and Medical Record Bureau which will handle all phases of this most important portion of the Center. The facilities of this institution will be made available for all teaching activities of the Center, and its staff will be under the supervision of Baylor Medical College and the participating University of Texas units.

Through coöperation of the Harris County Medical Society, there will be a fine Academy of Medicine Library, and in connection therewith a training school for graduate librarians for certificate in individual medical library practice. The only other such school

now operating is at Tulane University. This library will be for all physicians and dentists, for researchists in biologic sciences, for the study of legal medicine, and will maintain a depository for each unit in the Center with special provisions for separate ownership of books. In addition to library facilities, the Academy of Medicine will have lecture rooms and auditoriums for meeting groups.

The Public Health Center will include space available to the City and County Health Departments and serve as field units for training of students in preventive medicine, dentistry, and public health. Another special school will be established for medical case workers.

Facilities may be provided in a Division of Physical Medicine and Rehabilitation Center for rehabilitation of post-war and industrial injuries. This center is a new development in health which is endorsed by the Baruch Foundation for Physical Medicine and which provides for routine services to the industrial worker and veteran to provide special health services they need because of war disability. Howard A. Rusk, the consultant with the Baruch Foundation, will be in Houston next week in the interest of this great work.

While the Naval Hospital, now nearing completion, is not within the boundaries of the Texas Medical Center, it is located within easy access to the Center and coöperation between this splendid ten million dollar institution and the schools and hospitals of the Center will be yet another important advantage to health education and service for this section, with special attention to the field of plastic surgery.

Plans for a seven million dollar Veterans Hospital are expected to be announced soon and its location near the Medical Center will provide further advantages in health education and medical research for Texas doctors and students as well as excellent care for the men who so gallantly fought for us these last four years.

Housing facilities will be available in the Center for all teachers, research workers, technicians, and students at a rental commensurate with their income.

Ultimate plans call for the construction of a large Administration Building, in which facilities will be available for national meetings of all scientific groups. In addition to housing the administrative offices of the Center, homes will be offered to the State Medical, Dental, Pharmaceutical, and Nursing Associations.

In closing this talk, I find myself wishing I were an orator instead of a blunt spoken doctor, for surely there is opportunity here tonight to draw a violent contrast between the brutality, destruction, and death with which our minds have been filled and our spirits bruised these past years, and the dedication of ourselves here tonight to a task of bringing health to the ill, relief to the afflicted, and knowledge to those whose work it is to relieve mankind of suffering.

1801 Second National Bank Building.

HAY FEVER—FACT AND FICTION

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Two words which can rarely be used in medicine are "always" and "never." Nothing is always true. Nothing is never true. By the same token one is obliged to define and qualify "facts;" therefore, for the purpose of further discussion, I wish to state that the term "fact" will be used to express the thought of most allergists pertaining to the subject of hay fever as it concerns the average physician and hay fever sufferer.

By the term "fiction," I mean the multitude of half truths, untruths, and superstitions or myths in which hay fever abounds and because of which thousands, if not millions, of people suffer severely and unnecessarily each year.

There is an old adage that "truth is stranger than fiction." One might add that fiction is more fascinating and boundless in its promises. Fiction offers faith and hope —and faith and hope beget fiction. Add to this the fact that the average man is inherently charitable in his attitudes and one has the reasons for the great success of healing cults, of quacks—reasons for huge fortunes having been and being built upon gullible man's many desires, which range from that of getting rich quick to that of being cured easily, cheaply, quickly, and permanently of many diseases with which he may be afflicted. Faith, hope, and charity are wonderful virtues, but they won't cure hay fever!

Hay fever fiction includes an increasingly large number of promises, just promises. Some of these promises come dressed as fact; most of them are dressed in inference resembling or suggesting fact. They come from five general sources:

1. Well-meaning but misinformed neighbors, friends—and grandparents. For example, these good people frequently know of children who have "outgrown" their hay fever. Sometimes they are quite sure that the only recourse for a hay fever victim is to change climate, which means giving up his job, home, and friends and all that this means, because this is the only thing which

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helped what's-her-name who was a friend of a friend of theirs who lived down the street. Sometimes they know that little Johnny "just can't have hay fever—there's none in the family—besides, he's so young, and to one so young, God just wouldn't let it happen."

2. The pharmaceutical houses. They provide physicians with a series of eighteen or twenty handy "shots" for treating hay fever. They provide easy-to-use skin testing materials for "diagnosing" hay fever. Some of them only need to know in which section of the country physicians live to provide them with the "proper" treatment materials. Of course, they don't insist on selling any of these things but must have them available for the physician who "demands" them. They are also very obliging in offering through physicians (and to any one who wishes to buy) nose drops, eye drops, tablets, capsules, filters, and other remedies "for the prompt relief of hay fever." Several years ago a man from a well-known and highly respected clinic appeared at a national allergy society meeting, and, of all things, read a number of testimonials praising the product of a certain, also well-known, pharmaceutical house. At that time this company was cluttering physicians' desks almost daily with "convincing" advertisements praising that product. Today that product is seldom mentioned, but today another nationally known drug house is carrying the ball, although more subtly, with a certain red liquid for hypodermic injection, which is proving equally useless in the treatment of hay fever. Then there have been oral pollen therapy and more recently large doses of vitamin C. These are but examples of many things which pharmaceutical houses offer, as one of the sources of promises, and which as such contribute in no small way toward continued, usually unnecessary, suffering by hay fever victims. Such promises by pharmaceutical houses, I, charitably, call "fiction."

3. Quacks. This category includes that heterogeneous group which through manipulation, "laying on of hands," the use of electric vibrators, or through powers bestowed by a special act of God "cure" anything—certainly hay fever. This, of course, is salesmanship of the rankest order, but who is a more likely victim than the previously and repeatedly uninformed, misinformed, and disappointed man or woman who annually finds himself miserable because of hay fever? Who can blame such a person for not resisting this assuring, soft-spoken supply of soothing syrup?

4. The press. "Breathes there a man with soul so dead, who never to himself hath said," "It must be true—I saw it in print"? And what do people want to read and talk about? It must be something of wide interest, dramatically written, and must either stimulate or encourage hope. In too many matters the general reading public is not sufficiently concerned with accuracy and authenticity; these are secondary considerations. Truth in medicine, however, although not always easy to convey, is something which our lay editors should constantly strive to make clear because of its importance to so many and because to the gullible reading public, such things as they read must be true. Fortunately, most lay editors adhere to their code of ethics and do attempt to authenticate sensational stories before they are published, and for this they are entitled to a great deal of credit; but there are exceptions.

Because of *The Reader's Digest*, for example, a generally respected magazine, what physician in the past two years has not been asked to treat a patient for "athlete's foot" as prescribed in one of its articles; or has not been asked for "shots" of male sex hormone by some patient seeking only to perpetuate his proudest possession; or more recently (see the August, 1945, issue) has not been asked for the "four to six shot cure" for hay fever? "Hope springs eternal in the human breast" and adds no small bit to the coffers of our "free press." Did I say "free" press? What is more expensive than hope bogged down? Or lost hope? Lost partially at least as a result of this persistent peddling of poppycock?

5. An unwitting contributor to the success of these creators of hay fever fiction is the reputable physician who neglects to advise his hay fever patients differently. His neglect may be credited to one or more of several things:

a. Failure to recognize the extent of the influence upon and the harm which such misinformation causes the hay fever sufferer.

b. Failure to appreciate the severity of the hay fever victim's problem with its actual or potential complications.

c. Uncertainty in his own mind regarding the amount of truth or untruth in the dazzling claims made by these various sources.

It, therefore, behooves the physician to acquaint himself with and to impart to his patients such of the following facts as may be helpful to them.

1. Hay fever is not contagious, but being an allergy it does have a distinct tendency to occur in families. There are many instances of hay fever in which no allergy whatever is known to exist among a patient's ancestors or children; nevertheless, the tendency

toward the inheritance of the capacity to react is well-known. This is of diagnostic value.

2. Hay fever may occur at any age. Every allergist has, on occasion, seen a hay fever patient who, according to all available information, had no hay fever or other allergy before the age of 40 or even 50 years. These are exceptions, however. For many years, it has been recognized that the majority of allergic disease becomes manifest before the age of 20, and that after the age of 40, the development of true allergy is unusual. With time and increased study have come a greater knowledge and consciousness of the existence of the allergic state, with the result that physicians are recognizing the presence of allergy earlier in the patient's life. Clein,[3] in a very able study and report on his observations of 100 allergic children up to the age of 10 years, stated that 38 of the 100 developed seasonal hay fever, and of these 38, 16 cases of seasonal hay fever were diagnosed during or before the time the children were 3 years old.

3. Hay fever is *not* outgrown. There is an occasional instance of remission as a child approaches puberty and we have known of a few instances in which hay fever apparently disappeared spontaneously in one's latter years of life, but these are exceptions. Black[1] estimated the number of all allergic patients who show such a recovery as no more than 10 per cent. My impression is that even this figure is high. However, if one assumes this figure to be much higher, which it isn't, one is still certainly not justified in taking the chances of developing the complications which, untreated or improperly treated, hay fever sufferers do, as a rule, develop.

4. Results which the hay fever patient can expect depend upon the severity of the the disease; the degree and kind of existing complications, if any; the patient's willingness to coöperate, which for the best results is not always easy; and other factors. However, if one considers a number of patients with well-defined hay fever as a group, 75 per cent can get a good to excellent result, and an additional 15 or 20 per cent can be improved appreciably. To be sure physicians are dealing with subjective symptoms, and to be enthusiastic is, therefore, tempting. Nevertheless, by being as objective as possible, and by permitting the patient to retain his "sales resistance" when being questioned, it is my opinion, based on observation and experience, that these figures represent a conservative estimate.

5. A change of climate does prove beneficial to some hay fever victims, providing the change is to one in which the particular pollen or pollens to which he is sensitive do not occur; but because of this and for economic reasons, such a change is not always practicable. Furthermore, it is a common observation that after two or three years, after one has become situated in his new location, socially, and economically, he develops a sensitivity to the air borne pollens which occur there. It is my practice, therefore, to advise a patient to go wherever he wishes to live and I offer to furnish him with a list of names of allergists in his new location whom he may consult upon arrival. Metzger,[5] in writing from Tampa, summarized the subject very nicely as follows: "The layman, who, at great mental or financial risk, perhaps, seeks a 'cure' in Florida or elsewhere, without securing competent professional advice and accurate information, takes a long, long chance on following naught but the lure of a climatic mirage."

6. The effect of foods in hay fever is perhaps still a partially open subject. There are still a few allergists who say they believe food sensitivity in many hay fever patients does account for increased severity of symptoms. I don't know—but I doubt it and believe that most allergists doubt it. When one considers the fact that placebos will relieve a certain small percentage of hay fever patients of their subjective symptoms, is it not reasonable that focusing one's attention on foods, and removing them, would have a similar effect?

TREATMENT

There is no known short cut method for the successful treatment of hay fever. Because of limited time and perhaps also because of an understandable limited interest, suffice it to say that now as before, success depends upon the proper application of the following seven principles:

1. Proper diagnosis, through history, physical examination, and laboratory aids.

2. Determination of the offending pollens *and other inhalants* (which may be contributing or complicating factors); also through history *corroborated by* skin tests when possible.

3. Treatment with extracts of the allergenic pollen *and other inhalants*, beginning with relatively small doses and increasing them to a point *just below that of the individual patient's tolerance* or to what may be considered an optimal dosage. This dosage should be reached just before that time when appreciable quantities of the offending pollens can be expected in the air, or when possible, at a date no more than two or three days before the patient ordinarily develops *his* hay fever symptoms.

4. Reduction of the dosage with greatly increasing quantities of pollen in the air or as required by changing weather conditions or the physical condition of the patient.

5. The use of symptomatic treatment, if needed.

6. Education of the patient in matters which

will help to insure his coöperation—a very necessary and frequently overlooked consideration.

7. Education of the patient in regard to general hygienic matters, activities which he should avoid during the season, the avoidance of complicating inhalants when practical, etc.

When to Start Treatment.—The time to start hay fever treatment is always *now*. "Now" may be any time. It may be at the height of the patient's season. It may be ten months before the season—or at any time in between. For best results the average patient should begin treatment at least two months before the onset of his next hay fever season and should be treated perennially. Certain patients, however, obtain some benefit from treatment which is started during the season.

The complications of hay fever are essentially four in number:

COMPLICATIONS

1. There is a distinct tendency among hay fever sufferers to develop additional sensitivities, the most common being to pollen which occurs during another season than that in which he already suffers. Thus, a patient with one season of hay fever beginning in September commonly develops additional hay fever beginning at some earlier date. As a result, there are many patients who begin having hay fever in the spring and continue until late fall, little realizing that they are simply passing from one otherwise well-defined season into another throughout the spring, summer, and fall months.

Patients also tend to develop sensitivities to inhalants other than pollen, such as dusts of different kinds and animal danders, which fact must certainly be realized by the physician and patient, and steps taken accordingly if the best possible results are to be had in the treatment of hay fever. The development of additional sensitivities is something for which the hay fever patient is always a definite candidate.

2. Asthma is a common complication of hay fever and, in turn, of course, asthma itself has definite complications. It has been variously stated that between 30 and 60 per cent of hay fever victims develop asthma as a complication.

3. Sinusitis is not an uncommon complication. An allergic reaction produces swelling and since this allergic reaction of hay fever involves not only the nasal mucous membranes, but those of the sinuses as well, sufficient obstruction may result to prevent free drainage. In the absence of free drainage, infection results.

4. It is an accepted fact that certain diseases, notably deficiency diseases and acute infections, inhibit developmental growth. Likewise there has been considerable, if not positive, evidence that active allergy, perhaps through a disturbance of mineral metabolism and the proper utilization of other food substances such as vitamins, also serves to prevent proper developmental growth.

Because of the monumental work of Todd, of Cleveland, and his co-workers in relation to this subject of development growth in normal, healthy children and the effects of deviations from the normal healthy state, Cohen[4] was able to observe that "Growth is interfered with during periods of active allergy" as manifested "by failure to gain in weight, later by a failure to gain in height, and finally by a failure in the attainment of skeletal maturity."

We who practice allergy are aware of the large number of children under our care who have major orthodontic deformities. Straub,[6] a dentist of San Francisco, undertook to determine the number of children among 104 orthodontic applicants who might have allergy and found that "41 or 39.4 per cent were definitely allergic; 13 or 12.5 per cent were borderline, and 50 or 48.1 per cent were negative." It should be safe to assume that a number of the "negative" cases among this group of children will yet develop a clinically manifested allergy. It might also be safe to assume that a physician trained in allergy would have discovered an even greater number of allergic children in this group. At any rate there is good evidence to support the belief that many, perhaps the majority of orthodontic deformities are the result of an early allergy and its inhibiting effect on developmental growth. Furthermore, Bowen,[2] Straub,[6] Cohen,[4] and other students of this problem believe that dental and dentofacial deformities can be prevented to a large degree by the early recognition and control of such a patient's allergy, and that some of the relapses following orthodontic treatment can be attributed to an uncontrolled allergy. It should follow, therefore, that hay fever, one of the most important allergies, does have as one of its complications, an inhibiting effect on developmental growth.

The patient frequently asks, "Can you cure me?" For the average patient and in the sense that he will *never* have hay fever again, the answer is obviously "no"; not any more than we can "cure" diabetes, hypertensive heart disease, chronic glaucoma or many other noninfectious, nonacute, nonsurgical diseases. The hay fever patient has to decide between one of two things: (1) do nothing about his condition (following the advice and recommendations of any of the above "sources of fiction" is the same as doing

nothing about it) and very likely become worse or, (2) have his hay fever treated (managed) for varying lengths of time at varying time intervals and be comparatively well. He has to decide whether he wishes no loaf or perhaps three-fourths or nine-tenths of a loaf. Hay fever can usually be adequately controlled in an intelligent, coöperative patient, but there is no magic wand. I sincerely wish there were.

SUMMARY

Certain fallacies associated with hay fever have been classified as "fiction." Examples of this fiction have been discussed briefly under the heading of their respective sources which are as follows:

1. Well-meaning but misinformed friends.
2. The pharmaceutical houses.
3. Quacks.
4. The lay press.
5. The sincere but unwitting reputable physician.

Ten facts about hay fever as they concern the average physician and hay fever sufferer are set forth and discussed briefly. They include:

1. The hereditary tendency to develop hay fever.
2. The age incidence of developing this allergy.
3. Comment on the frequently heard statement that hay fever is outgrown.
4. Results which the patient can expect.
5. The effect of changing climate.
6. The possibility of foods influencing hay fever.
7. An outline of seven principles necessary for its successful treatment.
8. When to start treatment.
9. Four important complications.
10. An answer to the question, "Can hay fever be cured?"

REFERENCES

1. Black, J. H.: Facts that Should be Known about Allergy, Texas State J. Med. 41:21-24 (May) 1945.
2. Bowen, R.: Dental and Palate Deformities due to Perennial Nasal Allergy in Children, Balyeat-Bowen Hay Fever and Asthma Clinic Quarterly 8:2, 1939.
3. Clein, N. W.: The Growth and Development of Allergy, Ann. Allergy 3:1-11, 1945.
4. Cohen, M. B.: Orthodontic Problems Associated with Allergy, Angle Orthodontist 7:3, 1937.
5. Metzger, F. C.: Climatic Treatment of Hay Fever and Asthma, with special Reference to Florida, J. A. M. A. 112:29-32 (Jan. 7) 1939.
6. Straub, W. J.: Frequency of Allergy in Orthodontic Patients, J. Am. Dent. A. 31:334-342 (March 1) 1944.

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The provision of x-ray and diagnostic facilities, sanatoria, and rehabilitation services will not reduce tuberculosis unless people know the value of an x-ray of the chest, have one taken periodically, and take the necessary treatment if a diagnosis of tuberculosis is made. Mayhew Derryberry, Ph. D., Pub. Health Rep., Nov. 23, 1945.

FIELD PRACTICE IN PREVENTIVE MEDICINE FOR MEDICAL STUDENTS

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AND
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In the minds of many people the old saying "There is nothing new under the sun" is certainly true with reference to our ideas on medical education. Teaching by and through apprenticeship, which was practiced extensively in years past, was for a time either replaced entirely or supplemented to a very large degree by formal lectures. At present we are coming more and more to believe that "teaching by seeing" and by actual contact and experience is the most effective method and produces the most lasting results. No specialty in a medical curriculum lends itself better to this form of teaching than preventive medicine.

The Department of Preventive Medicine of the Medical Branch of the University of Texas has organized all of its courses upon the basic and fundamental concept that it is teaching men and women who want to go into the general practice of medicine. Therefore, all efforts have been directed toward teaching courses which will stimulate interest in the preventive phases of medicine and toward presenting the material in as practical a manner as possible.

In the freshman year consideration is given for one hour each week for one semester to the subject of quantitative methods of analysis of the results of various methods of treatment. Articles from current medical journals are reviewed and the results are carefully examined and quantitatively analyzed in order to determine if the conclusions drawn are justified. Applying such methods to his own practice, a student in subsequent years will be better able to evaluate his own results, based upon statistical analysis; or should he not be able to analyze the results by and for himself, he will, at least, seek an analysis from others before he draws any public or private conclusion.

In the sophomore year special emphasis is given to the subject of environmental sanitation in its broad sense. There are fifteen two-hour lecture-demonstrations on the following subjects:

1. Water supplies
   a. Municipal
   b. Rural

From the Department of Preventive Medicine, University of Texas, School of Medicine, Galveston, Texas.

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2. Sewage disposal
   a. Municipal
   b. Rural
3. Cross connections (of safe and unsafe water)
4. Swimming pool sanitation
5. Food control, including meat, milk, sea foods, poultry, vegetables, and other foods
6. Cafe sanitation
7. Garbage and waste disposal
8. Mosquito control
9. Rodent control
10. Air bacteriology
11. Industrial sanitation

In addition, in this year, fifteen one-hour lectures and conferences are held in epidemiology. These lecture-conferences are integrated very closely with related subjects in sanitation. For example, after consideration of the sanitary requirements for a safe milk supply, diseases spread in epidemic form by milk are considered and students are instructed how to make an epidemiological study of such an epidemic. The same is true for water, mosquitoes, rodents, and other disease carriers. To teach cafe sanitation effectively several epidemics of food poisoning are studied and analyzed. To emphasize our present knowledge of air sanitation epidemics of diseases which are believed to be airborne or droplet borne are studied. Such procedure vitalizes statistics, epidemiology, and sanitation and ties the three closely together, making them important to the general practitioner and not specialties for the public health worker. We have recognized from the very beginning that public health is a specialty practiced by persons especially trained for it. Undergraduate medical students are in medical school to prepare for the general practice of medicine and not to become specialists in public health.

The topics covered in lecture-conferences are re-emphasized by field trips carried out in groups of ten or eleven students, each group under the guidance of an instructor. These are field trips of four hours each. The students look

TABLE 1.—*Sanitation Data from Cafes Inspected in 1944 and 1945.*

Cafe No.	Article	Year	Bacterial Plate Count	Air Dried	Towel Dried	Temp. of Rinse Water	Chlorine Used	Type of Washing
1.	glasses	1944	40	—	+	150 F.	—	machine
		1945	2205	—	+	120	—	hand
	plates	1944	0	—	+	150	—	m
		1945	8	—	+	120	—	h
2.	glasses	1944	7000	+	—	n. i.	—	m
		1945	3100	+	—	120	—	m
	plates	1944	7500	+	—	n. i.	—	m
		1945	240	+	—	140	—	m
3.	glasses	1944	7500	+	—	108	—	m
		1945	TMTC	—	+	140	—	m
	plates	1944	2500	—	+	108	—	m
		1945	96	—	+	140	—	m
4.	glasses	1944	30	—	+	130	—	m
		1945	200	—	+	180	—	m
	plates	1944	n. i.	—	+	130	—	m
		1945	76	—	+	180	—	m
5.	cups	1944	3100	—	+	125	—	m
		1945	75+S	—	+	n. i.	+(90PPM)	h
	plates	1944	260	—	+	125	—	h
		1945	130	—	+	n. i.	+(90PPM)	h
6.	glasses	1944	7500	+	—	110	—	h
	cups	1945	750+S	+	—	170	—	h
	plates	1944	7500	+	—	110	—	h
		1945	380	+	—	170	—	h
7.	glasses	1944	50	+	—	164	—	h
		1945	84	+	—	160	—	h
	plates	1944	225	+	—	164	—	h
		1945	280	+	—	160	—	h
8.	glasses	1944	80	n. i.	n. i.	140	—	h
		1945	14	+	—	160	—	h
	plates	1944	110	n. i.	n. i.	140	—	h
		1945	12	+	—	160	—	h
9.	glasses	1944	7500	+	—	140	—	h
		1945	TMTC	—	+	warm	—	h
	plates	1944	7500	+	—	140	—	h
		1945	900	—	+	warm	—	h
10.	glasses	1944	400	n. i.	n. i.	cool	—	h
		1945	97	—	+	scald	—	h
	plates	1944	1100	n. i.	n. i.	cool	—	h
		1945	300	—	+	scald	—	h
11.	glasses	1944	385	+	—	warm	—	h
		1945	F+S	+	—	cold	+(170PPM)	h
	plates	1944	7500	+	—	142	—	m
		1945	260	—	+	140	—	m
12.	glasses	1944	7500	—	+	120	—	m
		1945	1260	—	+	130	—	m
	plates	1944	1000	—	+	120	—	m
		1945	1701	+	—	130	—	m
13.	glasses	1944	550	+	—	130	—	h
		1945	19	+	—	120	+(190PPM)	h
	plates	1944	470	+	—	130	—	h
		1945	F+S	+	—	120	+(190PPM)	h
14.	glasses	1944	7500	—	+	150	—	h
		1945	TMTC	—	+	150	+(10PPM)	h
	plates	1944	290	—	+	150	—	h
		1945	150	—	+	150	—	h
15.	glasses	1944	60	+	—	160	—	m
		1945	94	+	—	hot	—	m
	plates	1944	75	+	—	160	—	m
		1945	250	+	—	hot	—	m
16.	glasses	1944	7500	+	+	172	—	h
		1945	252	+	—	155	—	h
	plates	1944	2000	+	+	125	—	h
		1945	3528	+	—	155	—	h
17.	glasses	1944	7500	+	—	cold	—	h
		1945	TMTC	+	—	140	—	h
	plates	1944	7500	+	—	cold	—	h
		1945	819	+	—	140	—	h
18.	glasses	1944	120	—	+	n. i.	n. i.	n. i.
	plates	1944	7500	n. i.	n. i.	n. i.	n. i.	n. i.
19.	glasses	1944	7500	+	—	cool	—	h
	plates	1944	200	+	—	160	—	m
20.	glasses	1944	7500	+	—	130	—	h
	plates	1944	7500	+	—	150	—	h
21.	glasses	1944	7500	—	+	160	—	h
	plates	1944	750	—	+	160	—	h
22.	glasses	1945	1700	—	+	cold	—	m
	plates	1945	3000+S	—	+	cold	—	m
23.	cups	1945	2250	—	+	warm	—	h
	plates	1945	120	—	+	warm	—	h
24.	glasses	1945	37+S	—	+	140	—	m
	plates	1945	22	—	+	140	—	m
25.	glasses	1945	1600	—	+	112	—	h
	plates	1945	140	—	+	112	—	h
26.	glasses	1945	1000	+	—	145	—	m
	plates	1945	280	+	—	120	—	m
27.	glasses	1945	F+S	—	+	160	—	h
	plates	1945	36	—	+	160	—	h
28.	glasses	1945	1200	+	—	212	—	h
	plates	1945	800	+	—	212	—	h
29.	glasses	1945	1100	—	+	hot	—	m
	plates	1945	40	—	+	hot	—	m
30.	glasses	1945	TMTC	+	+	125	—	m
	plates	1945	1000	+	+	125	—	m
31.	glasses	1945	140	+	occasionally steam		—	m
	plates	1945	76	+	occasionally steam		—	m
32.	glasses	1945	880	—	+	112	—	h
	plates	1945	1100	—	+	112	—	h

Note: + stands for positive. — stands for negative. +S stands for positive "colony spreaders." n. i. stands for no information. F stands for few. TMTC stands for too many to count.

forward to them and rarely are absent even though there is no roll call. Following the first six field trips there is an informal conference covering the subjects involved in a very general and practical manner. The students conduct their own conferences under supervision and ask about and discuss such phases of the subject as are not entirely clear. The same type of conference is carried out after the second group of six field trips. Finally, there is an oral examination, covering epidemiology and sanitation. No written examinations are given.

In the junior year twenty-two hours are devoted to tropical medicine, emphasizing especially the epidemiological and preventive aspects of the more important diseases such as malaria, yellow fever, amebic dysentery, bacillary dysentery, cholera, rickettsial diseases, spirochetal diseases, plague, leprosy, filariasis, ankylostomiasis, and schistosomiasis. Eleven hours are devoted to industrial hygiene—here, too, emphasizing the preventive aspects. Consideration is given to the legal aspects of compensation, potential hazards of exposure to dusts, fumes, vapors, mists, and gases and the industrial dermatoses.

We have eliminated all written examinations and rely entirely upon oral conferences. These give opportunity to see how a student thinks and analyzes a situation, eliminates "cramming," and gives the instructor an idea as to how effectively or ineffectively he has presented his subject.

In all instances we attempt to teach through visual means.[4] To illustrate how such methods lend themselves to basic teaching, we shall describe one of our field trips—that of cafe inspection. Any one of the other eleven would serve equally as well.

There has been a tremendous increase in the dysenteries in the past few years.[3] Many people believe (and have adequate evidence) such increases are due, in a large measure, to insanitary practices in some of our eating establishments. Such bad practices may be increased by the type of labor now available to cafes, the tremendous increase of business, the rapid turnover of labor, the inadequacy of equipment—poorly maintained and difficult to repair, and the generalized "mental static" and spirit of restlessness. It is one thing to legislate that a cafe shall be clean and sanitary and shall serve its patrons in a sanitary and approved manner, but it is another thing to comply with such legislation.[2]

In order that the student may know correctly how to inspect a cafe, understand the problems of the owner or operator, and evaluate his impressions, each medical student goes into the field and makes such an inspection, talking first with the owner or operator. He is permitted to select any cafe which has not been previously inspected and usually selects the one he himself patronizes most frequently. Only when rechecks are desirable is any cafe visited twice.

The following points especially are noted:

1. Floors
   - Kind of material
   - Cleanliness
   - Drainage
2. Cleanliness
   - Walls
   - Ceilings
   - Fixtures, fans, lights, etc.
3. Doors and windows
   - Screens
   - Number flies present
4. Wash room facilities
   - Location
   - Cleanliness
   - Fixtures present
5. Utensils (pots, pans, stoves, hoods, etc.)
   - Condition
   - Cleanliness
   - Method of cleaning
6. Food preparation tables and meat block
   - Cleanliness
   - Overhead fixtures
7. Dishes
   - Method of washing
   - Method of sterilization—time
   - Method of drying
   - Storage
8. Refrigeration
   - Cleanliness
   - Temperature
   - Proper method of storing foods
9. Waste disposal method
10. Cleanliness of employees

Finally a representative number of glasses and plates are taken from the storage. One-fourth inches of the inner and outer rims of four glasses are swabbed with a sterile swab according to the technic approved by the Subcommittee on Food Utensil Sanitation of the Commitee on Standards of the American Public Health Association.[5] The swab is finally dropped into a tube containing 4 cc. of sterile normal saline solution. An area of 4 square inches in the bottom of four plates is swabbed in a like manner and this swab is dropped into 4 cc. of sterile normal saline. The tubes are immediately returned to the laboratory where 1 cc. of each is plated on a sterile agar plate. Counts of the number of colonies growing on the plates are made after twenty-four and forty-eight hours. Another 1 cc. from each tube is put into lactose broth.

Experimental evidence has shown that when dishes are handled properly the bacterial counts will be 100 or less.[1] The method does not distinguish between pathogens and non-pathogens but is merely an index of sanitary practices. The student learns that appearances are often deceiving and that high counts go with bad practices. He learns

all the common excuses and "hard luck stories" given by the operator. Within the past two years, seventeen cafes have been inspected each year; an additional fifteen have been inspected one year only. The resulting data are found in table 1.

The following observations are definite:

1. The temperature of the rinse water is rarely as high as the law requires.
2. Chlorine is rarely used.
3. Cup towels are common.
4. Most bacterial counts are excessively high.
5. Whenever the temperature of the rinse water is sufficiently high or whenever chlorine up to 50 p. p. m. is used, the bacterial counts are low.
6. There is no improvement in 1945 as compared to 1944, as gaged by bacterial counts.

Experience has shown that operators resent being told how to handle their dishes and expect perfect results if they think they have complied with instructions given them by the inspector. On this basis we believe it would be much better to tell the operator that he must serve his patrons only with glasses and dishes which are bacteriologically safe and then let the operator use any method he desires to attain this end.

It has been concluded that cafe sanitation, in general, is very poor and that the only reasonable approach must be through education—education of the food handler so that he realizes the reason for certain acceptable practices and education of the public so that they will demand safe and approved cafe sanitation.

Such a field trip, in which the student makes his own inspection, swab, plate counts, and other observations and associates his findings with the potentialities of dysenteries —a field trip in which the student inspects the place in which he himself often or regularly eats—really vitalizes preventive medicine and makes it practical to the man who plans to be a general practitioner.

REFERENCES

1. Andrews, J.: Method of Sanitizing Eating and Drinking Utensile, Pub. Health Rep. 59:1103-1118 (Aug. 25) 1944.
2. Dernehl, C. U.: Some Problems of Food Sanitation (In press).
3. Health of the United States at War, Pub. Health Rep. 58: 1281-1282 (Aug. 20) 1943.
4. Stead, F. M., and Nau, C. A.: A Practical Course in Environmental Sanitation for Medical Students, J. A. Am. M. Coll. 19:173-176 (May) 1944.
5. Tiedeman, W. D. (chairman): A Proposed Method for Control of Food Utensil Sanitation (Progress Report of the Subcommittee on Food Utensil Sanitation), Am. J. Pub. Health 34:255-258 (March) 1944.

ABSTRACT OF DISCUSSION

Dr. L. A. Byers, Edinburg: It is a pleasure to discuss this excellent presentation by Drs. Dernehl and Nau of the methods of instruction of preventive medicine in the Medical Branch of the University of Texas. I am sure we are all glad to see the large number of hours devoted to field trips. In my opinion field practice is not only of great value, but is absolutely essential if the student is to have any true and practical conception of environmental sanitation, and the work and program of public health agencies.

I can well agree that the undergraduate medical student is in medical school to prepare for the general practice of medicine and not to become a specialist in public health. He should learn, however, that public health is not something set apart from clinical medicine but is directly and vitally related to it. In the control of communicable diseases it is the practicing physician who makes the diagnosis; he is the one who must report the case; he is the one who can best educate the family in the need and importance of control measures that may be instituted; he is the one who by proper diagnosis and proper treatment may reduce the mortality rates from these diseases.

I feel that a department of preventive medicine has two principal objectives. One is to train the student to think always of prevention so that as a private physician he will apply the principles of preventive medicine in his every day practice. The second is to inculcate deeply into the prospective physician a sympathetic attitude toward the aims of public health authorities, and to give him accurate information about their program so that he may coöperate intelligently.

NUTRITION SURVEYS IN GERMANY

Charged with safeguarding the health of American soldiers and advising and cooperating with the Military Government in Germany, the Army Medical Department has furnished plans and directions, as well as personnel, for carrying out nutritional studies which far surpass in scope and magnitude anything of the kind ever attempted before, Major General Norman T. Kirk, Surgeon General of the Army, has announced.

At the present time about 20,000 civilians in the U. S. Zone of Germany are being given physical examinations each month and approximately 100,000 more are weighed monthly as a means of determining the health curve of the population in the American occupied areas. This unprecedented survey work is being carried on in Germany under five nutrition survey units and one in Austria, each headed by an expert nutrition officer with a staff of trained doctors and technicians qualified to establish the nutritional status of individuals. Each group is equipped with compact and mobile laboratory apparatus designed for making tests of blood hemoglobin, serum protein, plasma, vitamin C, thiamin, riboflavin, and other nutritional factors.

Examinations are conducted in every city of the United States Zone with the cooperation of civilian public health and food rationing authorities. In every city of over 10,000 population, weighing examinations are made of 5 per cent of the population. This percentage is graduated down to a point of .5 per cent of the population of a city of 1,000,000. These weighing examinations, which can be given rapidly, provide a rough indication of the nutritional status of various communities.

The nutritional physical examinations are done on a sampling basis to afford an accurate picture of the nutritional condition of different groups. In each case the individual is questioned regarding the diet he or she has been following and the amount of food consumed. From the clinical examinations and laboratory studies an estimate of the effect of such a diet can be made. An analysis of all the examinations given in a community form the basis for recommendations on the adequacy or inadequacy of food in that area.

Food and agricultural authorities take these studies into account in determining the amount of food supplies needed, the movement of food and estimates for food production.—S. G. O. Notes, Dec. 31, 1945.

Hotel Galvez, headquarters for the State Medical Association (left), and Buccaneer Hotel, headquarters for the Woman's Auxiliary (right).

GALVESTON EXTENDS A WELCOME

LILLIAN E. HERZ
GALVESTON, TEXAS

Galveston is hanging out her welcome sign.

With a consciousness of a wartime duty well performed, the city is ready now to greet old friends and to assure them that they will find the same cordiality, the same diversions for recreation and play, the same industrial activity along its waterfront, that marked its progress in prewar days.

To those of the medical profession who will come here for the annual session of the State Medical Association of Texas, Galveston offers a warm welcome—a welcome mixed with deep appreciation for their broad and understanding faith in trying times.

Galveston, aptly termed the Atlantic City of the Southwest—Treasure Island—is a city of rare beauty, of unusual appeal—a combination of old world charm and new world enterprise.

Here one finds a tropical island, surrounded by the crested waves of the Gulf of Mexico and the soothing waters of Galveston Bay, with broad esplanades, flanked by flowering oleanders and bougainvillaea—tall and stately palms.

On its gulf side stretch wide expanses of bathing beaches, broad boulevard drives, attractive hotels and tourist courts, a $2,000,000 municipal pier, and diversified amusement features.

On its bay side there are wharves, where ships come from the far corners of the world to make the city renowned as "the port of quickest dispatch." Here are loaded the mineral and agricultural products of the nation—cotton, wheat, coal, sugar, and other commodities, exports to the trade markets of the world.

Today these ships are laden with food, clothing, equipment to rehabilitate the people of the devastated nations, just as they transported lend-lease products to strategic centers during the war crisis.

Perhaps among all of its diversified assets, there is none of which the city is more justly proud than its medical center, made up of the many departments, buildings, and hospitals of the University of Texas School of Medicine. Here are gathered the most able leaders in medical science, under the capable administration of Dr. Chauncey D. Leake, vice-president and dean of the Medical Branch, who are not only providing medical training for the youth of Texas, but also the best of medical care for the people of Texas.

With the consummation of the proposed expansion program of the board of regents of the University, the Medical Branch will be able to offer even greater hospital facilities, broader opportunities for research, and a training program which will insure the best type of medical training for the future doctors of the state.

A $4,000,000 general hospital, half of which is being contributed to the people of Texas by the Sealy and Smith Foundation, the possibility of the establishment of a veterans hospital, additions to the laboratory facilities, construction of a new administration building, expansion of the Rebecca Sealy Nurses Residence, additions to its Children's Hospital, erection of new dormitories for its women students and staff—all are part of the reconversion program of the Medical Branch.

Aerial view of the University of Texas Medical Branch.

Arrangements are being completed for the development of the east end area, which will provide sites for medical college expansion and residential accommodations for its staff and personnel. A water control and improvement district is being established on the "flats" and bond issues have already been voted which will insure the necessary utility installations after the area is filled. The city administration of Galveston is coöperating wholeheartedly with medical college officials and the Sealy and Smith Foundation to make the medical center one of the outstanding in the South.

The original "Red Main Building" of the Medical Branch was established in 1890 when the first John Sealy contributed funds for the John Sealy Hospital, and the state legislature established the college. Since that time the people of Galveston have dedicated themselves to the furtherance of the medical plant, the late John Sealy leaving an endowment of from $15,000,000 to $20,000,000 for the John Sealy Hospital for the benefit of the people of Texas. Administered by the Sealy and Smith Foundation, millions of dollars have already been spent on improvements and millions more will be expended throughout the years as the need arises.

Included in the medical center is the John Sealy Hospital, which will eventually be supplanted by a mammoth modern general hospital. An excellent Negro Hospital was erected in 1937, at which time the Children's Hospital, which provides medical care for the children of the state, was also completed. The State Psychopathic Hospital, which was heretofore administered by the State Board of Control, has recently been re-opened as a part of the medical college plant, a teaching unit of the Medical Branch. Here persons mentally sick are given the best of care and at the same time provide teaching material in neuropsychiatry for medical students. The medical college Department of Psychiatry is recognized nationally for its able personnel.

Two hospitals not a part of the University but important in the medical picture are St. Mary's Infirmary and the U. S. Marine Hospital. St. Mary's is one of the oldest hospitals in the state. Operated by the Sisters of Charity, the institution has filled a big niche in the community. Additions have been made from time to time, and now being erected is a new modern addition to cost nearly $1,000,000, which will materially in-

U. S. Marine Hospital (above), and St. Mary's Infirmary (below).

crease the hospital beds of the city. The Marine Hospital, located in the western part of the city, is one of twenty-six hospitals operated by the U. S. Public Health Service. Close coöperation with the medical college administration makes it possible for students of the college to receive part of their extern training at these institutions. Students likewise do preceptorial work in hospitals throughout the state. There is also a close contact between the medical college and Houston medical institutions and hospitals.

Other buildings included in the medical center are the Margie B. Stewart Home for Convalescent Children, the gift of Mr. and Mrs. Maco Stewart, which has recently been opened; the beautiful Rebecca Sealy Nurses' Residence, which houses 165 student nurses and to which will soon be added a $250,000 addition; the $1,500,000 Out-Patient Clinic, which is considered one of the most completely equipped clinic building in the South; and the modern Laboratory Building, which will likewise be expanded to provide facilities for other departmental groups. The medical library which is housed in the Laboratory Building is recognized as one of the finest in the country.

Galveston has been rightly called the convention city of Texas, for there is probably no city in the state that plays host to more tourists and convention visitors than does Galveston. Regional, state, and national conventions are held here throughout the year, the mild winter climate, the delightful gulf breezes during the summer season, adequate and luxurious hotel facilities, the finest surf bathing in the world, deep sea fishing, and diversified amusements make a combination with which it is difficult for other cities to compete.

During the war Galveston was the hub of virtually every branch of military and naval service. A huge $10,000,000 Army air field was created, where were trained the best fighter pilots and bombers in the world. Use of this mammoth field has been acquired by the city for commercial air and passenger service which ultimately will provide direct contacts with the Latin American countries and an increase in the city's import and export trade.

Here too are established the permanent military forts—Fort Crockett, Fort Travis, Fort San Jacinto—all a part of the protective network of the island. The Camp Wallace Replacement Center and Blimp Base at Hitchcock, the United States Coast Guard Station, the United States Naval Base, each served its definite place in the wartime program and will continue to serve as the need arises in the peacetime era.

Galveston is distinctive for other reasons. It has led the state in establishing educational institutions and hospital facilities, in banking activities, in newspaper fields. The first newspaper established in Texas, the Galveston *News*, which acquired the first telephone in Texas, still continues to do business at the old stand after 104 years of service. The First National Bank was the first banking institution in the state and St. Mary's Infirmary, founded in 1866, provided the first hospital facilities. Galveston's Chamber of Commerce, which recently celebrated its centennial anniversary, was likewise the oldest chamber in the state. John Sealy Hospital established the first training school for nurses here when a group of public spirited women organized the service. Back in the days when golf was not as popular as today, Galveston had the first country club and golf course in the state. Creation of the Army air field robbed the city of its golf facilities, but efforts are now being directed toward the establishment of a new modern municipal course in the western section of the city. History tells us that Galveston was the first city in Texas to have a customs house and it also boasted the first Y. M. C. A. building. When brick and stone were little

used in the construction business, the late Jim Brown imported from England special pressed brick to construct his palatial residence on Broadway, and this was the first brick home erected in Texas. The building still stands, impressive as ever, the home of El Mina Shrine Temple.

Aside from its educational and cultural background, Galveston is preëminently historical. The history of Galveston has been the history of Texas, for it has been inseparably linked with the state under its six flags.

The city itself dates back as far as 1528 with Cabeza De Vaca being credited as the first white man to touch its shores. Subsequently La Salle rediscovered the island in 1686 for his king and country. In 1777 the area succumbed to Spanish rule when Count Bernardo de Galvez took possession. The island known as Snake Island was later dubbed Galveztown and finally became Galveston.

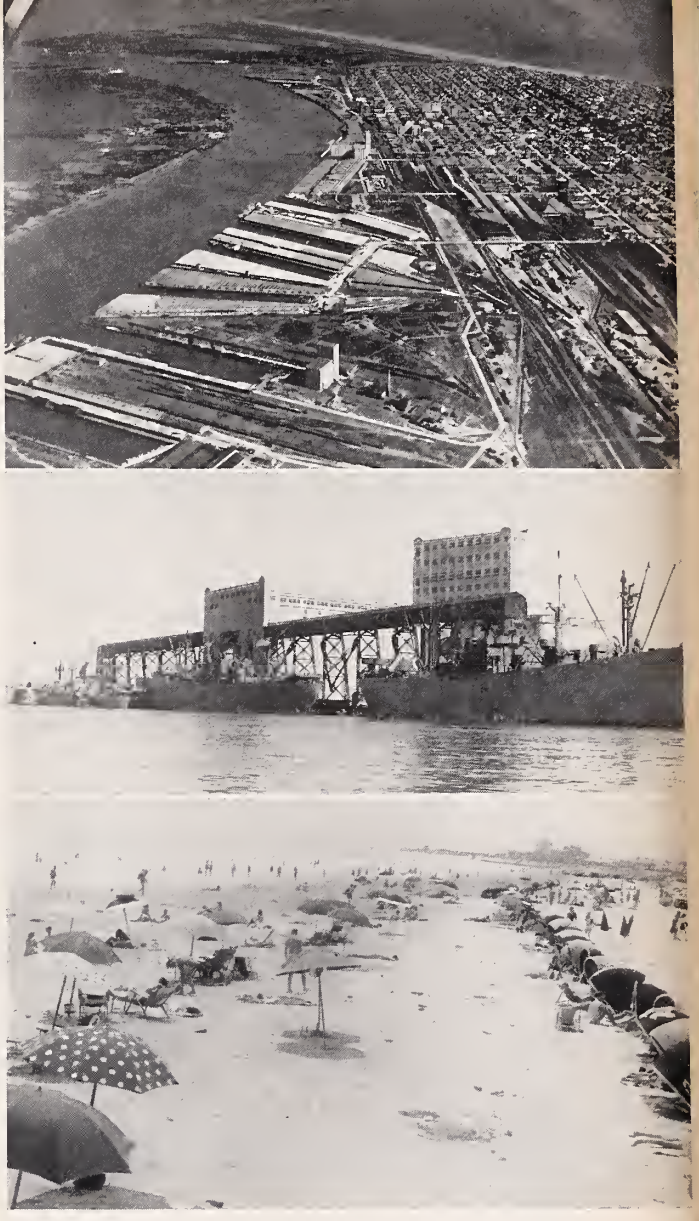
Since the days when Jean Lafitte the Pirate invaded the sacred precincts there has been something dashing and adventurous about the city. Tales are recounted of his escapades while on the island. At a place known as "Three Trees" the swashbuckling buccaneer held sway in 1819 and constructed what is said to have been the first white settlement on the island. The Three Trees property is now owned by the Sidney Sherman chapter of the Daughters of the Republic with a view to making it into a park.

Back of the Sealy Hospital is another place of historic interest where Lafitte is said to have made his home. It is said that here he was made captive, necessitating his leaving behind his buried treasures. The story of buried treasures has been one of the favorite folk legends in this vicinity.

Galveston also played a prominent part in the days of the Confederacy when the battle of Galveston was fought and the city surrendered. It was in the drawing room of the old Brown mansion that Captain Brown and other officers surrendered their swords to Union officers, ending one of the most momentous chapters in history. The Brown home was also used as an emergency hospital during these historical events.

Stories are told of the courageous services rendered by the nuns of the Ursuline convent during the yellow fever scourge. Stories are also related of the indomitable courage of Galvestonians when the city was besieged by storm and tidal wave in 1900.

Undaunted by this catastrophe, citizens united to rebuild their city, with the strong conviction that out of this adversity would rise an even greater and more beautiful city. Led by men of vision and courage the city



Typical Galveston scenes—Aerial view of docks (above), ships at a wharf (center), and a bathing beach (below).

was literally raised from the depths, a huge seawall of concrete, stone, and steel was constructed, and other protective measures taken, so that today, the city is adequately protected as later events have demonstrated. Plans are being formulated for further extension of the seawall westward, so that the entire island on the gulf side will be fully protected.

Although preëminently a port city, and for many decades the first cotton export port, Galveston is a rendezvous for pleasure seekers who come here to enjoy the refreshing gulf breezes, bask in the sunshine on its sand studded beaches, and enjoy the finest of surf bathing. In recent years the resort facilities have been developed and advanced, and because of its splendid location and the beauty of its geographical layout, Galveston is fast

vying with the attractive resorts in more populated areas.

If one comes to Galveston there is virtually every type of entertainment to be found. Beautifully furnished hotels and tourist courts of the most modern type are available. Swank night clubs help to while away the evening hours, while fishing either from the gulf side or deep sea fishing in the bay attracts anglers from great distances. Tennis courts, golf courses, riding stables, and long boulevard and beach drives make it possible for everyone to enjoy his vacation here. No matter the size of one's pocketbook, there is always some pleasure that can be enjoyed.

Galveston is proud of her record as a port city. Long recognized as the greatest sulphur shipping port of the world, she has regained her lost prestige during the war years in the shipment of cotton. Galveston wharves present a busy scene and thousands of tons of shipping to the far countries pass over them.

Located along the waterfront are the largest exporting elevators on tidewater in the United States, and huge amounts of grain are transported through the port to the markets of the world. Galveston has set a record for grain shipments that has never been equalled. Different commodities, both foreign and domestic, are handled by the port, including rice, vegetables, foods, textiles, nonmetallic minerals, cottonseed cake and meal, flour, bagging, paper, oil, iron, and steel. Close proximity to the oil refineries of Texas City and the mainland bring an abundance of tankers that ply the seas from this port. Galveston is one of the foremost American ports for banana receipts. A new $200,000 banana wharf was erected several years ago for the United Fruit Company.

The intracoastal canal is a valuable adjunct to the port. The canal, which extended from New Orleans to Galveston, was continued to Corpus Christi and Brownsville, linking Galveston and other gulf ports with the Middle West and East by a low cost waterway system.

Under a postwar program Galveston Wharves, which now is municipally owned, is reconstructing its wharves for the large postwar business it is at present enjoying and which is expected to increase materially. New concrete flooring is being laid and new bulkheads and piers installed.

The railroads of Galveston are well represented, five large trunk lines entering the city. These facilities are supplemented by Galveston Wharves, which operates switch engines and fifty-one miles of storage and switch tracks.

Galveston's important location, its excellent port facilities and its long experience in handling cargoes have combined to make the port the most convenient and the most logical gateway connecting the great Southwest with the markets of the world.

Galveston has always been a city of homes. While there is no distinctive type of architecture, many of the old homes of the city bear some relation to old world architecture. Those erected in recent years, particularly in the western section of the city, are of the most modern trend.

Coming into Galveston one glimpses masses of the lovely Spanish dagger mingling with the softly fronded cedar and shrubs of blooming oleanders. As one enters the Broadway esplanade, tall stately palms and oak trees intersperse the multicolored oleander blossoms which grow luxuriantly throughout the summer months. Because of the prolific growth of the oleander here, the city has been rightly named the Oleander City. The blossom was first brought to Galveston by the late Joseph Osterman from Jamaica as a gift to his sister, the late Mrs. Isidore Dyer. The shrub has grown in riotous profusion, with all the streets lined with the gorgeous blossoms. In many places of the city the shrubs have been pruned until they are really massive trees. Thirty-one varieties of the oleanders are listed.

Roses, brilliant hybiscus, bougainvillaea in a variety of hues, scarlet poinsettias, blue bonnets, and lilies all blend to make the city a veritable paradise of flowers throughout the year. Live oaks, magnolias, towering palms, and other greenery emphasize its tropical setting.

With its gates ajar, the key to the city hanging on the outside, and a cheery greeting waiting for those who come this way, Galveston bids you welcome. Whether it is for a brief visit, or a long stay, here will be found health giving qualities, opportunity for diversion and recreation, and an insight into one of the busiest ports in the world.

WOMEN DOCTORS

A study, reported in the October 13 issue of *The J. A. M. A.*, reveals that of 1,240 women graduates from medical schools, 82 per cent who married have remained in full time medical work.

Florence de L. Lowther, Ph. D., Associate Professor of Zoology, and Helen R. Downes, Ph. D., Assistant Professor of Chemistry, both of Barnard College, New York, found that 1,115 of this number, or 90 per cent, were in full time medical work during 1942-1943.

The study, the authors said, was undertaken to discover what use the women graduates of seven representative Eastern medical colleges during the last 20 years have made of their training. The authors concluded that "the evidence . . . presented indicates that women physicians as a group have amply justified their training and that marriage has had a negligible effect on their professional activities."

MONDAY, MAY 6	TUESDAY, MAY 7	WEDNESDAY, MAY 8	THURSDAY, MAY 9
REGISTRATION AND SPECIAL SOCIETIES	8:00 A. M. REGISTRATION	8:00 A. M.—12 NOON SECTION MEETINGS (8 SECTIONS)	8:00 A. M. HOUSE OF DELEGATES ELECTION OF OFFICERS
TEXAS RY. & TRAUMATIC SURGICAL ASSOCIATION TEXAS STATE HEART ASSOC. TEXAS ASSOC. OF MED. ANESTHETISTS. TEXAS CHAPTER AMERICAN COLLEGE OF CHEST PHYSICIANS. CONFERENCE, COUNTY AND CITY HEALTH OFFICERS. TEXAS NEUROPSYCHIATRIC ASSOC. TEXAS SOCIETY OF PROCTOLOGISTS & GASTRO-ENTEROLOGISTS.	Visit Technical and Scientific Exhibits	Visit Technical and Scientific Exhibits	Visit Technical and Scientific Exhibits
	9:00 A. M.—10:30 A. M. OPENING EXERCISES	12:45 P. M.—2:45 P. M. CLINICAL LUNCHEONS MEDICINE AND PEDIATRICS SURGERY, OBSTETRICS, & GYNECOLOGY EYE, EAR, NOSE AND THROAT	9:30 A. M.—11:45 A. M. GENERAL MEETING
	10:45 A. M.—12:15 P. M. GENERAL MEETING		Visit Technical and Scientific Exhibits
	1:30 P. M.—5:30 P. M. SECTION MEETINGS (8 SECTIONS)	Visit Technical and Scientific Exhibits	12:15 P. M.—2:15 P. M. COMBINED SECTIONS LUNCHEON
10:00 A. M.—12 NOON HOUSE OF DELEGATES	Visit Technical and Scientific Exhibits	3:15 P. M.—5:00 P. M. GENERAL MEETING	2:15 P. M.—5:35 P. M. COMBINED SECTIONS MEETING
Visit Technical and Scientific Exhibits	6:00 P. M.—8:30 P. M. ALUMNI BANQUETS SPECIAL GROUPS	Visit Technical and Scientific Exhibits	
1:00 P. M. HOUSE OF DELEGATES	9:15 P. M. PRESIDENT'S RECEPTION AND BALL	5:15 P. M.—6:15 P. M. MEMORIAL SERVICES	
Visit Technical and Scientific Exhibits		6:30 P. M.—7:45 P. M. FRATERNITY BANQUETS	
		8:00 P. M. HOUSE OF DELEGATES	
		Visit Technical and Scientific Exhibits	

Program and Announcements
of the
SEVENTY-NINTH ANNUAL SESSION
of the
State Medical Association of Texas

GALVESTON, TEXAS

GENERAL MEETINGS

OPENING EXERCISES

Tuesday, May 7

9:00 a. m. to 10:30 a. m.

Ballroom, Lobby Floor, Hotel Galvez

DICK P. WALL, M. D., Chairman, General Arrangements Committee, Galveston, Presiding.

1. *Invocation.*
   THE REV. EDMUND H. GIBSON, Galveston, Rector, Trinity Episcopal Church.
2. *Presentation of Wartime Presidents of the Woman's Auxiliary to the State Medical Association of Texas, and of the State Medical Association.*
   Mrs. P. R. Denman, Houston, 1942.
   Mrs. A. B. Pumphrey, Fort Worth, 1943.
   Mrs. Sam Thompson, Kerrville, 1944.
   Dr. Judson L. Taylor, Houston 1942-1943 (deceased).
   Dr. C. S. Venable, San Antonio, 1943-1944.
   DICK P. WALL, M. D., Galveston.
3. *Address of Welcome.*
   FRANCIS A. GARBADE, M. D., President, Galveston County Medical Society.
4. *Greetings from the Woman's Auxiliary to the State Medical Association of Texas.*

MRS. CHARLES B. ALEXANDER, San Antonio, President, Woman's Auxiliary to the State Medical Association of Texas.

5. *President's Address: The Obligations of the State Medical Association of Texas to the Returning Medical Officers Who Had Their Postgraduate Training Curtailed by Reason of the War; Our Sons Who Are Now in Medical Schools, and Those Who Are to Enter in the Future.*

H. F. CONNALLY, M. D., Waco, Eightieth President, State Medical Association of Texas.

(Ten minute recess.)

WANTED: Questions for Honor Guests at Clinical Luncheons

Each registrant is invited to furnish questions, preferably in advance, to submit to Honor Guests at the Clinical Luncheons of the 1946 annual session. In preparing such questions, name the guest to whom the question should be addressed, write the question clearly and concisely, and sign your own name and address.

Mail questions in advance of the session to the State Secretary, 1404 West El Paso Street, Fort Worth 3; turn them in to Section Officers or to the Registration desk when you arrive in Galveston; or have them ready when you attend a Clinical Luncheon.

GENERAL MEETING

Tuesday, May 7

10:45 a. m. to 12:15 p. m.

Ballroom, Lobby Floor, Hotel Galvez

H. F. CONNALLY, M. D., President, Presiding

1. (10:45 a. m.) *Intestinal Obstruction in Infants of a Functional Nature, Probably Due to Congenital Absence of Certain Elements in the Autonomic Nervous System.*

JAMES L. WILSON, A. B., M. D.,
Ann Arbor, Michigan.
(Guest of the Section on Pediatrics.)
Professor of Pediatrics, University of Michigan Medical School; Chairman, Department of Pediatrics and Communicable Diseases, University Hospital of Michigan.

A report is made of a series of infants who presented the clinical signs characteristic of intestinal obstruction, yet who on operation showed no evidence whatever of mechanical intestinal obstruction. A pathological and clinical analysis is made and the relationship between it and megacolon is discussed. Pathological studies reveal in a number of these cases an absence of the Auerbach's plexus in the colon. Discussion is made of the probable relationship between this finding and the symptoms of the disease.

2. (11:15 a. m.) *Prematurity from the Obstetrical Viewpoint.*

NICHOLSON J. EASTMAN, M. D.,
Baltimore, Maryland.
(Guest of the Section on Obstetrics and Gynecology.)
Professor of Obstetrics, Johns Hopkins University School of Medicine; Resident Ophthalmologist, Johns Hopkins Hospital.

Prematurity is the greatest cause of neonatal death. Although pediatricians have made great advances in the care of the premature infant, the death toll taken by prematurity could be substantially reduced by more intelligent obstetrical management of this problem. In an effort to ascertain in what way obstetricians can help in this condition, the experience of the Johns Hopkins Hospital with premature labors has been reviewed over the past twenty years and conclusions drawn in regard to how the incidence of prematurity can be reduced and how premature labors should be managed.

3. (11:45 a. m.) *The Doctor Looks at Public Health.*

REGINALD M. ATWATER, M. D., Dr. P. H.,
New York, New York.
(Guest of the Section on Public Health.)
Executive Secretary, American Public Health Association.

GENERAL MEETING

Wednesday, May 8

3:15 p. m. to 4:45 p. m.

Ballroom, Lobby Floor, Hotel Galvez

H. F. CONNALLY, M. D., President, Presiding.

1. (3:15 p. m.) *Prepayment Medical Service Plans.*

JAY KETCHUM,
Chicago, Illinois.
(Guest of the State Medical Association.)
Director of Division of Prepayment Medical Care, Council on Medical Service and Public Relations, American Medical Association.

2. (3:45 p. m.) *Some Uses and Abuses of the Thiocyanates.*

M. HERBERT BARKER, M. S., M. D., F. A. C. P.,
Chicago, Illinois.
(Guest of the Section on Medicine.)
Assistant Professor of Medicine, in charge of Hypertension and Renal Clinics, Northwestern University Medical School.

The thiocyanates have been known to have a hypotensive effect for eighty-five years, but only since 1925 have they been used to an increasing extent in the clinical management of hypertension. A relief of symptoms and a reduction of the blood pressure with lessened strain on the cardiovascular system may be expected in about 50 per cent of the patients. The dosage may be controlled by periodic determinations of the blood concentration of the thiocyanates, which should be maintained at a level between 6 and 12 mg. for the best clinical results without toxic manifestations. Plethoric hypertensions usually respond favorably to controlled cyanate therapy. Certain contraindications and abuses will be discussed.

3. (4:15 p. m.) *Coccidioidomycosis, a Civilian and Military Problem—A General Pathological Study Based upon Experiences with the Disease in the Armed Forces.*

WILEY D. FORBUS, M. D.,
Durham, North Carolina.
(Guest of the Section on Clinical Pathology.)
Professor of Pathology, Duke University School of Medicine; Pathologist, Duke, Watts, and Lincoln Hospitals; Associate Editor, Archives of Pathology.

In this paper is presented a brief review of the history of this disease from its discovery in South America to the present time, the object of this historical review being to trace the development of the basic pathogenic principles involved in the development of the disease. There is included also a summary of the findings in 95 cases of coccidioidomycosis submitted to the Army Institute of Pathology for review by various branches of the armed services. In connection with the latter presentation, certain new concepts relating to the causation, the development, and the course of the disease are presented. The importance of this disease as a future problem for both the civilian and the military physician is discussed.

GENERAL MEETING—MEMORIAL SERVICES

Wednesday, May 8

5:15 p. m. to 6:15 p. m.

Ballroom, Lobby Floor, Hotel Galvez

W. L. CROSTHWAIT, M. D., Waco, Chairman, Committee on Memorial Exercises, Presiding.

1. *Invocation.* WIL R. JOHNSON, D. D., Pastor, First Presbyterian Church, Galveston.
2. *One Sweetly Solemn Thought.* Ambrose.
   MR. GLENN GORDON, Galveston.
   MR. VICTOR NEAL, Galveston, Accompanist.
3. *Roll Call of Deceased Members and Memorial Address for Woman's Auxiliary.*
   MRS. P. R. DENMAN, Houston.
4. *Roll Call of Deceased Physicians, 1944 and 1945.*
   HOLMAN TAYLOR, M. D., Secretary, State Medical Association, Fort Worth.
5. *Memorial Address for Physicians.*
   W. L. CROSTHWAIT, M. A., Waco.
6. *Crossing the Bar.*
   MR. GLENN GORDON, Galveston.
   MR. VICTOR NEAL, Galveston, Accompanist.
7. *Benediction.* WIL R. JOHNSON, D. D.

GENERAL MEETING

Thursday, May 9

9:30 a. m. to 11:00 a. m.

Ballroom, Lobby Floor, Hotel Galvez

H. F. CONNALLY, M. D., President, Presiding

1. (9:30 a. m.) *Exophthalmos Associated with Endocrine Dysfunction.*

JACK S. GUYTON, M. D.,
Baltimore, Maryland.
(Guest of the Section on Eye, Ear, Nose, and Throat.)
Associate Professor of Ophthalmology, Johns Hopkins University School of Medicine; Assistant Director, Wilmer Ophthalmological Institute, Johns Hopkins Hospital.

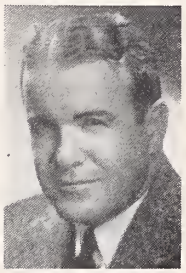
Endocrine exophthalmos is most often seen in Graves' disease, but it may appear along with spontaneous myxedema or even without thyroid disturbances. It apparently results from overproduction of TSH (thyroid stimulating hormone) by the pituitary. An excess of TSH is believed to cause increased water storage in the orbital tissues.

About 65 per cent of patients with untreated Graves' disease have an apparent exophthalmos, and in about 4 per cent the exophthalmic symptoms are out of all proportion to hyperthyroid symptoms. Contrary to general belief, exophthalmos more often increases than decreases after subtotal thyroidectomy.

Damage to visual function may result if exophthalmic symptoms become severe. In severe or malignant exophthalmos there is increased intraorbital tension or resistance to pressure, edema of the lids and conjunctiva, and often palsies of the extraocular muscles. Vision may be lost as a result of corneal ulceration or of secondary optic atrophy.

Malignant exophthalmos may often be prevented if the predominance of ocular symptoms is recognized in time to avoid subtotal thyroidectomy. Once established, malignant exophthalmos may be benefited by the administration of thyroid hormone or by judicious irradiation of the pituitary. However, if the exophthalmos is so severe as to constitute an imminent danger to visual function, some form of orbital decompression is indicated. An improved technique for lateral decompression of the orbit, which has given eminently satisfactory results, is described.

2. (10:00 a. m.) *Indications for Pulmonary Resection.*



O. THERON CLAGETT, M. S., M. D., F. A. C. S.,
Rochester, Minnesota.
(Guest of the Section on Surgery.)
Instructor in Surgery, Mayo Foundation, University of Minnesota Medical School; Surgeon, Colonial and St. Mary's Hospitals.

Development of thoracic surgery in the last decade has been remarkable. Pulmonary resection is now being performed frequently for a variety of conditions. A discussion of the various conditions for which pulmonary resection should be considered the treatment seems worth while at this time. Some of the more common conditions for which resection is indicated are carcinoma of the lung, cysts of the lung, adenomas of the bronchus, pulmonary tuberculosis, and various types of pulmonary suppurative disease. The indications for operation in each of these conditions will be discussed.

3. (10:30 a. m.) *Diagnosis of Liver Abscess by Means of Thorotrast Hepatosplenography.*

ROBERT J. REEVES, M. D.,
Durham, North Carolina.
(Guest of the Section on Radiology and Physiotherapy.)
Professor of Roentgenology, Duke University School of Medicine.

A brief discussion of the history and causes of this important problem followed by a consideration of the differential diagnosis. With the return of our Army from tropical countries, the possibilities of amebic infection are stressed. The technic of injection of thorium dioxide is given and the importance of localization of the abscess is shown with a lowering of the mortality rate in the cases diagnosed and treated while still in the early stage. The retention of thorium in the liver and spleen is studied and the rate of excretion from the liver is observed. A few detailed case histories are given to show the importance of this aid in diagnosis.

COMBINED SECTIONS MEETING

Thursday, May 9

2:15 p. m. to 4:15 p. m.

Ballroom, Lobby Floor, Hotel Galvez

H. F. CONNALLY, M. D., President, Presiding

1. (2:15) *Nitrogen and Phosphorus in the Treatment of Renal Disease.*
   M. HERBERT BARKER, Chicago, Ill.
2. (2:35) *Surgery in the Aged.*
   O. T. CLAGETT, Rochester, Minn.
3. (2:55) *Penicillin in Obstetrics.*
   NICHOLSON J. EASTMAN, Baltimore, Md.
4. (3:15) *The Relationship of Ophthalmology to General Medicine.*
   JACK S. GUYTON, Baltimore, Md.
5. (3:35) *Brucellosis, a General Pathological Consideration of Human and Animal Infection by Brucella.*
   WILEY D. FORBUS, Durham, N. C.
6. (3:55) *The Influence of Maternal Health on the Occurrence of Congenital Anomalies.*
   JAMES L. WILSON, Ann Arbor, Mich.

CLINICAL LUNCHEONS

MEDICINE AND PEDIATRICS

Wednesday, May 8

12:45 p. m. to 2:45 p. m.

Ballroom, Lobby Floor, Hotel Galvez

HONOR GUESTS

M. HERBERT BARKER, Chicago, Ill., Assistant Professor of Medicine, in charge of Hypertension and Renal Clinics, Northwestern University Medical School.

JAMES L. WILSON, Ann Arbor, Mich., Professor of Pediatrics, University of Michigan Medical School; Chairman, Department of Pediatrics and Communicable Diseases, University Hospital of Michigan.

ROBERT J. REEVES, Durham, N. C., Professor of Roentgenology, Duke University School of Medicine.

REGINALD M. ATWATER, New York, N. Y., Executive Secretary, American Public Health Association.

MR. JAY KETCHUM, Chicago, Ill., Director of Division of Prepayment Medical Care, Council on Medical Service and Public Relations, American Medical Association.

EYE, EAR, NOSE, AND THROAT

Wednesday, May 8

12:45 p. m. to 2:45 p. m.

Basement Room, Basement, Hotel Galvez

HONOR GUEST

JACK S. GUYTON, Baltimore, Md., Associate Professor of Ophthalmology, Johns Hopkins University School of Medicine; Assistant Director, Wilmer Ophthalmological Institute, Johns Hopkins Hospital.

SURGERY, OBSTETRICS, AND GYNECOLOGY

Wednesday, May 8

12:45 p. m. to 2:45 p. m.

Terrace Dining Room, Lobby Floor, Hotel Galvez

HONOR GUESTS

O. THERON CLAGETT, Rochester, Minn., Instructor in Surgery, Mayo Foundation, University of Minnesota Medical School; Surgeon, Colonial and St. Mary's Hospitals.

NICHOLSON J. EASTMAN, Baltimore, Md., Professor of Obstetrics, Johns Hopkins University School of Medicine; Obstetrician-in-Chief, Johns Hopkins Hospital.

WILEY D. FORBUS, Durham, N. C., Professor of Pathology, Duke University School of Medicine; Pathologist, Duke, Watts, and Lincoln Hospitals; Associate Editor, Archives of Pathology.

COMBINED SECTIONS LUNCHEON

Thursday, May 9

12:15 p. m. to 2:15 p. m.

Terrace Dining Room, Lobby Floor, Hotel Galvez

HONOR GUESTS

REGINALD M. ATWATER, New York, N. Y., Executive Secretary, American Public Health Association.

M. HERBERT BARKER, Chicago, Ill., Assistant Professor of Medicine, in charge of Hypertension and Renal Clinics, Northwestern University Medical School.

O. THERON CLAGETT, Rochester, Minn., Instructor in Surgery, Mayo Foundation, University of Minnesota Medical School; Surgeon, Colonial and St. Mary's Hospital.

NICHOLSON J. EASTMAN, Baltimore, Md., Professor of Obstetrics, Johns Hopkins University School of Medicine; Obstetrician-in-Chief, Johns Hopkins Hospital.

WILEY D. FORBUS, Durham, N. C., Professor, Duke University School of Medicine; Pathologist, Duke, Watts, and Lincoln Hospitals; Associate Editor, Archives of Pathology.

JACK S. GUYTON, Baltimore, Md., Associate Professor of Ophthalmology, Johns Hopkins University School of Medicine; Assistant Director, Wilmer Ophthalmological Institute, Johns Hopkins Hospital.

MR. JAY KETCHUM, Chicago, Ill., director of Division of Prepayment Medical Care, Council on Medical Service and Public Relations, American Medical Association.

ROBERT J. REEVES, Durham, N. C., Professor of Roentgenology, Duke University School of Medicine.

JAMES L. WILSON, Ann Arbor, Mich., Professor of Pediatrics, University of Michigan Medical School; Chairman, Department of Pediatrics and Communicable Diseases, University Hospital of Michigan.

SECTION MEETINGS

SECTION ON MEDICINE

Tuesday, May 7

1:30 p. m. to 5:30 p. m.

Ballroom, Lobby Floor, Hotel Galvez

Chairman—W. H. POTTS, JR., Dallas.

Secretary—EDWIN L. RIPPY, Dallas.

Guest of the Section—M. HERBERT BARKER, Chicago, Ill.

Section Sponsors—STEPHEN WEISZ and GEORGE DECHERD, Galveston.

1. *Chronic Nontuberculous Diseases of the Chest.*
ALVIS E. GREER, Houston.

This paper deals with conditions of chronic nontuberculous diseases of the chest and stresses their importance in the differential diagnosis of pulmonary tuberculosis. There may be a tendency at this time to diagnose chest conditions on roentgenological study alone, without taking into consideration all the varying factors of family contacts, symptomatology, and pertinent laboratory data, and physical examination, in arriving at a studied differentiation of chest diseases. Bronchiectasis, mycotic infections of the lungs, pulmonary fibrosis, and so forth are discussed.

Discussion to be opened by FRANK CARMAN, Dallas, and R. G. MCCORKLE, San Antonio.

2. *Esophageal Obstruction and Hemorrhage.*
CECIL O. PATTERSON, Dallas.

Congenital esophageal obstruction may be quickly fatal in the newborn. Chemical burns and obstruction by foreign bodies may be fatal or result in permanent invalidism in childhood or in the older patient. Hemorrhage from esophageal varices represents a high percentage of upper gastro-intestinal hemorrhage and may be quickly fatal in the child or adult. Emergency as well as more definitive treatment of esophageal obstruction and a few anatomical and technical considerations in the obliteration of esophageal varices by sclerosing agents will be presented.

Discussion to be opened by H. GRADY BEVIL, Beaumont, and PAUL J. THOMAS, Dallas.

3. *Acute Cardiac Emergencies.*
TINSLEY R. HARRISON, Dallas.

A discussion of the clinical recognition and management of certain acute emergencies, including angina pectoris, myocardial infarction, pulmonary embolism, acute edema of the lungs, the arrhythmias, and so forth.

Discussion to be opened by GEORGE R. HERRMANN, Galveston and JAMES A. GREENE, Houston.

4. *Infectious Hepatitis.*

M. HERBERT BARKER, M. S., M. D., F. A. C. P.

Chicago, Ill.

Assistant Professor of Medicine, in charge of Hypertension and Renal Clinics, Northwestern University Medical School.

Infectious hepatitis is rapidly spreading worldwide disease. The symptoms, physical findings, and clinical course of infectious hepatitis will be reviewed briefly. Emphasis will be made upon its early detection and treatment in the icteric and nonicteric stages. Certain diagnostic aids, liver function tests, and therapeutic experiences will be discussed.

5. *The Diagnosis and Management of Diabetic Neuropathies.*

RAYMOND GREGORY, Galveston.

Discussion to be opened by M. D. LEVY, Houston, and EDWIN L. RIPPY, Dallas.

6. *Cholesterosis in Various Diseases and the Effects of Various Decholesterolizing Agents.*

GEORGE R. HERRMANN, Galveston.

Discussion to be opened by TINSLEY R. HARRISON, Dallas, and JAMES A. GREENE, Houston.

7. *Present Status of Knowledge Concerning the Etiology of Primary Atypical Pneumonia.*

S. EDWARD SULKIN, PH. D., Dallas.

A large number of nonbacterial agents have been incriminated as the cause of primary atypical pneumonia. However, it seems probable that the agent, or agents, responsible for the majority of cases presenting this clinical syndrome is as yet unknown. The results of animal experimentation are confusing and difficult to interpret, due largely to the complications introduced by the occurrence of spontaneous pulmonary lesions in the experimental animals. An attempt will be made to evaluate the many conflicting reports.

Discussion to be opened by LUDWIK ANIGSTEIN, Galveston, and ALFRED W. HARRIS, Dallas.

8. *Primary Atypical Pneumonia with Observation of 60 Cases.*

DON W. CHAPMAN, Houston.

Data on 60 cases of primary atypical pneumonia. Its etiology, although not completely worked out, appears to involve a filtrable virus. Clinically and roentgenographically, the disease occurs primarily either as epidemic, benign, circumscribed pneumonia or as sporadic, disseminated focal pneumonias. The roentgenological examination has been the most substantial aid in the proper study of this condition.

Discussion to be opened by W. H. POTTS, JR., Dallas, and CARL SHAFFER, Houston.

Wednesday, May 8

8:00 a. m. to 12:00 noon

Ballroom, Lobby Floor, Hotel Galvez

9. *Benadryl, Its Therapeutic Value in Allergy.*

RALPH BOWEN, Houston.

A study of more than 120 allergic cases personally directed and a recapitulation of more than 1,100 other cases furnished by Parke, Davis Co. Use and application of benadryl in chronic urticarial problems, several of many years standing, which yielded to complete control after treatment with two capsules daily. Discussion of the drug's pharmacology and its side effects, and of its use and limitations in the management of asthma, hay fever, and other types of allergic dermatoses, including some allergic diseases of childhood.

Discussion to be opened by ALBERT H. BRADEN and GEORGE J. SEIBOLD, Houston.

10. Rh *Factor in General Medicine.*

J. M. HILL, Dallas.

Analysis of the clinical experience gained at Baylor Hospital during a period of two years in which routine *Rh* testing has been done in all transfusions, obstetrical cases, and infants born. The importance of some of the newer discoveries in this field is discussed in connection with their therapeutic implications. Some new developments, including original work, with clinical application, are presented.

Discussion to be opened by ARILD E. HANSEN, Galveston.

11. *Neuropsychiatric Problems of Returning Servicemen.*

HAMILTON F. FORD and TOM MCMILLAN, Galveston.

The types of neuropsychiatric disorders presented by veterans are reviewed. This includes servicemen with medical discharges and those who developed illnesses following nonmedical discharges. A discussion of the various factors responsible for psychiatric breakdowns which occur in returning servicemen after discharge from service is given. The psychiatric program of the Veterans Administration, including community clinics, clinics established in conjunction with medical centers, and the procedure for admission to Veterans Administration Facilities, is described.

Discussion to be opened by PERRY C. TALKINGTON, Dallas, and A. HAUSER, Houston.

12. *The Diagnosis and Treatment of the Anemias.*

WILLIAM C. LEVIN, Galveston.

The proper approach to the problem of anemias is the concept that any anemia is a manifestation of some disease or deficiency rather than a primary clinical entity. An accurate diagnosis must be made before treatment is instituted. The diagnostic methods include a complete clinical study of the patient, together with routine laboratory work, and in a minority of cases, specialized laboratory studies. Once the diagnosis is established, specific treatment should be directed toward correction of the physiological defect.

Discussion to be opened by VICTOR E. SCHULZE, San Angelo, and DEWITT NEIGHBORS, Fort Worth.

13. *Acute Rheumatic Fever in Adults.*

HOWARD C. COGGESHALL, Dallas.

A discussion of the epidemiology, pathology, clinical manifestations, and treatment of acute rheumatic fever as observed in 220 patients in an Army camp in Colorado. The analysis illustrates the relationship of the disease to hemolytic streptococcal infections, crowding, cardiac complications, and the use of massive doses of salicylates. Data are presented to show the advantage of administering salicylates by mouth as compared with the intravenous method.

Discussion to be opened by PAUL J. THOMAS, and ALFRED W. HARRIS, Dallas.

14. *Hypo-Leydigism and Hypopituitarism, Diagnosis and Treatment.*

JAMES A. GREENE, Houston.

The difficulties of the diagnosis of primary hypo-Leydigism and hypopituitarism in boys near puberty are discussed. "Fröhlich's syndrome" is also discussed in relation to delayed puberty. The differentiation of delayed puberty, hypopituitarism, and primary hypo-Leydigism is discussed. The treatment of each is presented. The diagnosis and treatment of the male climacteric is discussed.

Discussion to be opened by RAYMOND GREGORY, Galveston, and ARTHUR GROLLMAN, Dallas.

15. *The Relation of the Central Nervous System to Endocrine and Metabolic Disorders.*

ARTHUR GROLLMAN, Dallas.

The regulatory centers of the diencephalon, particularly the hypothalamus, are now recognized as playing an important part in the pathogenesis of many disorders which in the past have been looked upon as of endocrine or metabolic origin. The clinical picture observed in hypothalamic disorders will usually involve a combination of what superficially appears to be a disorder of metabolic, endocrine, and psychiatric disturbance. The physiological function of the diencephalon and its role in the pathogenesis of certain clinical disorders will be discussed.

Discussion to be opened by GEORGE R. HERRMANN, Galveston, and M. D. LEVY, Houston.

16. *The Use of Thiouracil in the Management of Thyrotoxic States.*

ALFRED W. HARRIS and JAMES E. ROBERTSON, Dallas

Thiouracil offers the greatest advance in the medical treatment of hyperthyroidism since Plummer's reintroduction of iodine. Use of the drug has also helped change the concepts of thyroid disease. Original enthusiasm has been tempered by drug reactions and occasional failures. The former have been infre-

quently encountered in this series. The rationale of the use of thiouracil, its limitations, its use in cardiovascular problems associated with hyperthyroidism, and the newer thiourea derivatives are discussed.

Discussion to be opened by RAYMOND GREGORY, Galveston, and ARTHUR GROLLMAN, Dallas.

SECTION ON SURGERY

Tuesday, May 7

1:30 p. m. to 5:30 p. m.

Terrace Dining Room, Lobby Floor, Hotel Galvez

Chairman—R. WILSON CROSTHWAIT, Waco.
Secretary—H. WALTON COCHRAN, Dallas.
Guest of the Section—O. THERON CLAGETT, Rochester, Minn.
Section Sponsors—F. W. AVES and S. R. SNODGRASS, Galveston.

1. (1:30) *Gastro-Jejuno-Colic Fistula.*
J. T. KRUEGER, Lubbock.

A consideration of incidence, etiology, patbology, symptomatology, and diagnosis.

Discussion to be opened by Q. B. LEE, Wichita Falls.

2. (2:00) *War Wounds of the Liver.*
GORDON F. MADDING, San Angelo.

A report of 829 wounds of the liver observed in a forward hospital, which emphasizes the importance of bile leakage and liver parenchymal damage. Adequate external drainage is advocated as the most satisfactory treatment.

Discussion to be opened by ANDREW B. SMALL, Dallas.

3. (2:30) *Intravascular Thrombosis As a Surgical Complication.*
ROBERT M. MOORE, Galveston.

A review of some of the most recent literature, witb the aid of lantern slides.

Discussion to be opened by E. H. CALDWELL, Tyler.

4. (3:00) *Anesthesia in Thoracic Surgery.*
EARL WEIR, Dallas.

Discussion to be opened by H. C. SLOCUM, Galveston.

A discussion of the role of the anesthetist in the care of the patient undergoing operation on tbe thorax, including a consideration of the part he should play in the preoperative preparation of the patient and in the early postoperative period, as well as during the administration of the anesthetic itself.

5. (3:30) *Surgery of the Pancreas.*

O. THERON CLAGETT, M. S., M. D., F. A. C. S.
Rochester, Minn.
Instructor in Surgery, Mayo Foundation, University of Minnesota Medical School; Surgeon, Colonial and St. Mary's Hospitals.

The pancreas is one of the last organs of the body to resist surgical attack. At the present time, however, there are a variety of lesions of the pancreas for which operation can be considered. It is important, therefore, to review the development of surgery of the pancreas and to discuss the indication for and the technics of the various operations on the pancreas.

6. (4:00) *Safety Factors in Intrathoracic Surgery following Trauma.*
JAMES T. LEE, Wichita Falls.

A consideration of preoperative measures, anesthetic techniques, and operative procedures which are thought to increase the safety of intrathoracic surgery following trauma.

Discussion to be opened by ROBERT SHAW, Dallas.

7. (4:30) *Restoration of the Hand.*
J. R. COCHRAN, Fort Worth.

A discussion of reconstructive surgery based on a series of cases seen at the William Beaumont General Hospital.

Discussion to be opened by LESLIE SADLER, Waco.

8. (5:00) *Vascular Injuries, Particularly Complications Influencing the Evidence of Gangrene.*
JAMES E. PITTMAN, Houston, and CLYDE THOMAS, Big Spring.

A report of a series of cases treated by tbe authors at tbe 127th General Hospital in France and Germany.

Discussion to be opened by ROBERT S. SPARKMAN, Dallas.

Wednesday, May 8

8:00 a. m. to 12:00 noon

Terrace Dining Room, Lobby Floor, Hotel Galvez

9. (8:00) *The Urological Management of "Cord Bladder" Patients in World War II.*
MICHAEL K. O'HEERON, Houston.

A study based on 111 cases of cord bladder observed by the author while Chief of Urology at Percy Jones General Hospital, Battle Creek, Mich. Perineal external urethrotomy is advocated as the best method of catheter drainage. Empbasis is placed upon periodic complete examinations and the prompt treatment of urinary tract sepsis and calculi. Cystometry and residual urine determination are considered to be of value in determining bladder function.

Discussion to be opened by HUB ISAACKS, Fort Worth.

10. (8:30) *Cleaning Traumatic Wound by Multiple Fine-Stream Pressure Irrigation —an Improved Method.*
J. PEYTON BARNES, Houston.

A description of an improved method for the mechanical cleansing of traumatic wounds. The principle involved is tbe use of many very fine streams of water under pressure, all of the streams concentrated in a small area. This method is much faster and more efficient than other methods of irrigating, scrubbing, and so forth. Demonstrations and a clinical case are presented on a 16 mm. color movie film.

Discussion to be opened by JOE T. GILBERT, Austin.

11. (9:00) *Immediate Repair of Severed Tendons,*
HERBERT POYNER, Houston.

A report of the end results in 198 cases.

Discussion to be opened by WALTER STUCK, San Antonio.

12. (9:30) *Surgical Treatment of Hypertrophic Pyloric Stenosis.*
J. WARNER DUCKETT, Dallas.

A review of the accepted methods of operative treatment of this condition, including anesthesia, type of incision, wound closure, postoperative care, and complications. The discussion will be based on a series of about 50 cases operated on by the author.

Discussion to be opened by JOE WHITE, Fort Worth.

13. (10:00) *Reducing the Morbidity and Mortality in Surgery of the Colon.*
A. O. SINGLETON, Galveston.

A report of colonic surgery at the John Sealy Hospital for a thirty year period. Recent reduction in morbidity and mortality is considered to be due in a large part to more careful preoperative preparation and to one-stage operations which have been made possible by gastric suction and the parenteral administration of fluids, electrolytes, sugars, and proteins.

Discussion to be opened by G. V. BRINDLEY, Temple.

14. (10:30) *Principles of Planning Reconstruction of Facial Defects.*
COL. T. G. BLOCKER, JR., Wakeman General Hospital, Camp Atterbury, Ind.

A general discussion outlining the armamentarium of the

plastic surgeon and the application of different methods of reconstruction of various facial defects.

Discussion to be opened by H. L. D. KIRKHAM, Houston.

15. (11:00) *Sympathectomy for Certain Forms of Peripheral Vascular Disease.*
THOMAS B. AYCOCK and JAMES W. HENDRICK, Baltimore, Md.

A discussion of the proper role of sympathectomy in the treatment of certain circulatory diseases of the extremities. Specifically considered are thrombo-angiitis obliterans, arteriosclerosis with and without gangrene, diabetic gangrene, frostbite with gangrene, causalgia, hyperhidrosis, chronic ulceration of the lower extremities associated with thrombophlebitis with fibrosis, lymphangiectasis, and chronic ulcerative dermatitis of the lower extremities.

Discussion to be opened by JAMES GREENWOOD, JR., Houston.

SECTION ON OBSTETRICS AND GYNECOLOGY

Tuesday, May 7

1:30 p. m. to 5:30 p. m.

Private Dining Rooms 1, 2, and 3, Lobby Floor, Hotel Galvez

Chairman—ROBERT A. JOHNSTON, Houston.

Secretary—JOHN D. WEAVER, Austin.

Guest of the Section—NICHOLSON J. EASTMAN, Baltimore, Md.

Section Sponsors—J. L. JINKINS and H. REID ROBINSON, Galveston.

1. *Variance in Hydrogen Ion Concentration (pH) in Normal and Abnormal Vaginas* (motion picture).
KARL JOHN KARNAKY, Houston.

The paper consists of the determination of the hydrogen ion concentration (pH) in 263 consecutive normal and abnormal vaginas. The averages of the normal and abnormal vaginas are given as well as the number of times less acid the abnormal vagina is than the normal. The reason for acid drugs in the treatment of various pathological conditions of the vagina.

2. *Ovarian Hemorrhage,*
JOHN WALTER JONES, Texarkana.

Symptoms, diagnosis, and treatment of ovarian hemorrhage. Review of 21 cases seen in private practice by the author since 1939.

3. *Differential Diagnosis of Abdominal Conditions in Women.*
WILLARD R. COOKE, Galveston.

Abdominal symptoms caused by gynecologic disease. Torsions and hemorrhage. Limitations of the Friedman test in diagnosis of ectopic pregnancy. Vesical symptomatology due to gynecologic disease. The colon in abdominal and pelvic symptomatology.

4. *Anesthesia for Cesarean Section.*
C. R. ALLEN and H. C. SLOCUM, Galveston.

5. *The Obstetrical Cripple.*
GEORGE ADAMS, Houston.

6. *A Review of 5,000 Obstetrical Cases at the Harris Memorial Methodist Hospital, Fort Worth, Texas.*
G. HERBERT BEAVERS, JERRELL BENNETT, ROY L. GROGAN, and CAREY HIETT, Fort Worth.

7. *Intermenstrual Pain.*
A. EWING WINSETT, Amarillo.

Historical facts in the literature; the diagnosis, particularly its confusion with other pelvic and abdominal conditions; its incidence and possible cause.

8. *Management of the Menopause and Climacteric.*
WILLIAM P. DEVEREUX, Dallas.

Wednesday, May 8

8:00 a. m. to 12:00 noon

Private Dining Rooms 1, 2, and 3, Lobby Floor, Hotel Galvez

9. *Gynecological Indications for Therapeutic Abortions.*
REED WOOD, Galveston.

Various medical and surgical indications for therapeutic abortions will be considered, with the various conditions warranting abortions.

10. *The Use of Cotton Sutures in Episiotomy Repair* (motion picture).
WALTER MORSE, Houston.

11. *Vulval Malignancies.*
E. W. BERTNER, Houston.

The paper will include a review of malignancies involving the vulva, with special emphasis on early diagnosis and radical treatment, with report of a series of cases.

12. A *Review of 200 Consultations in Private Obstetrical Practice.*

NICHOLSON J. EASTMAN, M. D.
Baltimore, Md.

Professor of Obstetrics, Johns Hopkins University School of Medicine; Obstetrican-in-Chief, Johns Hopkins Hospital.

The fact that a physician calls for a consultation in an obstetrical case usually indicates that he is dealing with a perplexing and serious problem. A survey of a large number of consultations therefore should prove instructive in regard to the commoner types of difficulty which practitioners meet in obstetrics. The writer's experience in 200 such consultations is reviewed with emphasis laid on the practical problems involved and their solution.

13. *The Prevention of Syphilis in the Newborn.*
CHESTER N. FRAZIER, Galveston.

14. *Essentials to Adequate Gynecologic Patient Study.*
A. LOUIS DIPPEL, Houston.

As a result of the war, many gynecologic patients today are being cared for by physicians other than gynecologists. Unfamiliarity with thorough patient study in these cases has led to inferior diagnostic procedures, and to far from ideal methods of treatment. Similarily, attempts to circumvent diagnostic aids and thereby conserve man-hours has led to undesirable end results. As such is the case, it seems desirable to review some of the essentials to adequate study in patients presenting pelvic symptoms. Examples of deviations from the ideal work-up leading to errors in treatment will be cited.

15. *Uterosalpingography—Report of a Fatality.*
ARTHUR M. FARIS, Houston.

The discussion will be centered around lantern slides showing representative pathologic conditions and development anomalies that can be demonstrated by this method, plus a case report of intravasation of the opaque media with immediate death.

16. *The Modern Management of Uterine Prolapse.*
L. W. POLLOK, Temple.

The etiologic and anatomic background of uterine prolapse has been outlined and its prophylaxis and surgical correction have been discussed, with special reference to the merits and defects of the various operations devised for its cure. It is emphasized that uterine prolapse is essentially a hernia and that its correction must be based upon the same principles as are applicable to the correction of hernia anywhere else in the body.

Discussion to be opened by H. F. CONNALLY, JR., and C. G. CATTO, Waco.

SECTION ON EYE, EAR, NOSE, AND THROAT

Tuesday, May 7—Ophthalmology

1:30 p. m. to 5:30 p. m.

Basement Room, Basement, Hotel Galvez

Chairman—V. R. HURST, Longview.

Secretary—BURBANK WOODSON, Temple.

Guest of the Section—JACK S. GUYTON, Baltimore, Md.

Section Sponsors—GEORGE S. MCREYNOLDS and WILLIAM B. POTTER, Galveston.

1. *Dacryorhinocystitis* (15 minutes).
HAROLD M. BLOCK, Dallas.

Surgical anatomy of the lacrimal sac and the nasolacrimal duct area is presented. The author's approach and technique is described and his method of maintenance of patency of the fistula and the canaliculus is covered. A few problems in the selection of surgical cases by lipiodol injection and x-ray study and probing are presented. Cases and results will be discussed.

Discussion to be opened by WILLIAM DAVIS GILL, San Antonio (3 minutes), and EVERETT VEIRS, Temple (3 minutes).

2. *Management of Congenital Cataracts in the Young Child* (15 minutes).
HENRY L. HILGARTNER, Austin.

Types of congenital cataracts and their surgical management based on a study of cases of this type at the Texas School for the Blind during the past twenty-five years. Illustrated with colored photographs and drawings.

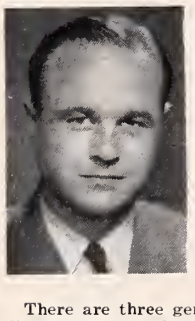
Discussion to be opened by A. E. JACKSON, Fort Worth (3 minutes), and DAN BRANNIN, Dallas (3 minutes).

3. *Recurrent Allergic Retrobulbar Neuritis* (15 minutes).
VAN D. RATHGEBER, Fort Worth.

A review of the literature and report of a case.

Discussion to be opened by CLARENCE S. SYKES, Galveston (3 minutes), and NORMA B. ELLES, Houston (3 minutes).

4. *Ptosis Operations* (motion picture) (70 minutes).



JACK S. GUYTON, M. D.
Baltimore, Md.

Associate Professor of Ophthalmology, Johns Hopkins University school of Medicine; Assistant Director, Wilmer Ophthalmological Institute, Johns Hopkins Hospital.

There are three general types of ptosis operations, with many different ways of performing each type. Uniform results are best obtained by an individual ophthalmologist if he selects one satisfactory technique of each type and varies the type of operation employed in different cases according to specific indications.

The three general types of operations, with the indications for each and the particular technique preferred by the author, are as follows:

1. Shortening the levator. Preferred if the levator is not *completely* paralyzed. Blascovicz technique.

2. Attaching lid to the superior rectus muscle. Preferred if the levator is completely paralyzed; the superior rectus is not paretic, and binocular vision is not endangered by the operation. Dickey technique.

3. Attaching lid to the frontalis muscle. Preferred if the levator is completely paralyzed and either the superior rectus is paretic or binocular vision would be endangered by a Dickey operation. Friedenwald technique.

Each of these operations is illustrated with motion pictures.

Intermission (5 minutes).

5. *Refraction* (15 minutes).
WILLIAM B. POTTER, Galveston.

Discussion to be opened by E. L. GOAR, Houston (3 minutes), and SAM N. KEY, Austin (3 minutes).

6. *Radiation Therapy in Carcinoma Originating at the Limbus: Report of 2 Cases Treated with Radium* (15 minutes).
EDWIN M. SYKES, San Antonio.

A general discussion of radiation therapy as applied to epitheliomata originating at the limbus, a review of techniques which have been recommended, and a description of 2 cases of carcinoma of the limbus. Illustrated with kodachrome slides.

Discussion to be opened by C. M. GRISWOLD, Houston (10 minutes), and M. K. MCCULLOUGH, Dallas (3 minutes).

7. *Marcus Gunn Phenomenon (Jaw Winking Reflex)* (15 minutes).
V. A. BLACK, Wharton.

A brief review of the history of the phenomenon, theories as to the etiology, and new case reports. Suggested methods of treatment from the neurosurgical standpoint and from the ophthalmological standpoint are given.

Discussion to be opened by CHARLES R. POTTS, Houston (3 minutes), and OSCAR MARCHMAN, JR., Dallas and Longview (3 minutes).

8. *The Glaucoma Patient—A Rational Follow-Up System* (15 minutes).
EDWARD W. GRIFFEY, Houston.

A consideration chiefly of the problem of do's and don't's that any intelligent patient may follow. Special emphasis is placed upon the importance of regular check-up for purposes of recording tension, reaction to and proper potency and type of miotics, central visual acuity and fields. There is a plea for better and more instruction in clinical courses in ophthalmology. Too many general practitioners are ignorant of the subject and let their patients go blind on the assumption that their loss in visual acuity is due to cataract. Precaution against faulty habits of diet and purgation, picture shows, and so forth are urged.

Discussion to be opened by F. H. NEWTON, Dallas (3 minutes), and W. J. WOOLSEY, Waco (3 minutes).

Wednesday, May 8—Otolaryngology

8:00 a. m. to 12:00 noon

Basement Room, Basement, Hotel Galvez

9. *Combat Ophthalmology and Otolaryngology in the Okinawan Campaign* (15 minutes).
EDWARD D. MCKAY, Temple.

A review of 554 cases: 388 operative and 166 nonoperative.

Discussion to be opened by JOHN L. MATTHEWS, San Antonio (Ophthalmology) (5 minutes), and J. P. ADERHOLD, San Antonio (Otolaryngology) (5 minutes).

10. *Nasal Allergy* (15 minutes).
L. E. DARROUGH, Dallas.

A discussion of the pathologic considerations involving the relation of allergy and chronic sinus infection; diagnostic procedure—evaluation of nasal findings and determination of causative allergic factors; and method of treatment, emphasizing the necessity of treating both allergy and infection.

Discussion to be opened by J. M. ROBISON, Houston (5 minutes), and L. C. HEARE, Port Arthur (5 minutes).

11. *Clinical Experiences with Intracranial Complications of Nose and Ear Infections* (15 minutes).
GATLIN MITCHELL, Fort Worth.

A discussion of the clinical course, bacteriology, surgical indications and management, and therapeutic management of these cases.

Discussion to be opened by L. J. LOGUE, Houston (5 minutes), and GEORGE S. MCREYNOLDS, Galveston (5 minutes).

12. *Cancer of the Larynx: Its Diagnosis and Treatment* (20 minutes).
C. C. CODY, Houston.

Discussion to be opened by E. H. CARY, Dallas (5 minutes), and A. F. CLARK, San Antonio (5 minutes).

Intermission (5 minutes).

13. *Etiology of Otomycosis; An Experimental Study* (15 minutes).
WILLIAM B. SHARP, Galveston.

A clinical and mycologic study of 40 cases of otomycosis directing primary attention to the etiologic relationship between the condition and fungi present, commonly Aspergillus niger and A. flavus. Consideration is given to any antigenic distinction between strains recovered in otomycosis and frankly saprophytic strains, toxic properties, therapeutic effect of fungicidal preparations, and so forth. The presence of fungi appears to account for the characteristic findings in typical cases. There is less reason to presume that fungi invade healthy skin to cause this disorder of the auditory canal initially.

Discussion to be opened by EDGAR P. HUTCHINGS, Marlin (5 minutes), and J. B. NAIL, Wichita Falls (5 minutes).

14. *Aural Manifestations of Scurvy* (15 minutes).
JOHN LOUIS BURGESS, Waco.

The term "myringitis bullosa hemorrhagica" describes a definite picture encountered in the ear, formerly thought to be an aftermath of influenza. These hemorrhagic blisters on the drum are early manifestations of scurvy. A subclinical deficiency of vitamin C may be caused to cross the clinical threshold either by an increased demand in certain illnesses or by a decreased intake of the vitamin. Forty-two cases are reported. Specific treatment is described.

Discussion to be opened by BERT DEBORD, Temple (5 minutes), and AUGUST J. STREIT, Amarillo (5 minutes).

15. *External Otitis* (15 minutes).
JAMES T. ROBISON, Austin.

A discussion of the frequency among ear patients of this condition and a brief resume of the literature. The more common causes and relationship to the anatomy of parts affected, complications, and treatment are considered. Illustrated with colored photograph slides.

Discussion to be opened by J. H. FOSTER, Houston (10 minutes).

16. *Major Surgery of the Suppurative Paranasal Sinuses* (15 minutes).
CLAUDE D. WINBORN, Dallas.

A restatement of the principles involved in surgical treatment of acute and chronic infections of the sinuses based on anatomy, physiology, and morbidity. The relative merits of intranasal and external procedures are discussed with their application to specific conditions.

Discussion to be opened by JOHN JENKINS, Dallas (5 minutes).

SECTION ON RADIOLOGY AND PHYSIOTHERAPY

Tuesday, May 7

1:30 p. m. to 5:30 p. m.

Anchor Room, Lobby Floor, Hotel Galvez

Chairman—TOM B. BOND, Fort Worth.
Secretary—GLENN D. CARLSON, Dallas.
Guest of the Section—ROBERT J. REEVES, Durham, N. C.
Section Sponsors—JESSE B. JOHNSON and CHESTER N. FRAZIER, Galveston.

1. *Diverticula of the Duodenum.*
A. G. BARSH, Lubbock.

Duodenal diverticula is a subject of growing importance as the diagnostic procedures improve. The history of the condition, and the literature in comparison with the report of 32 cases resulting from 2,100 consecutive roentgen examinations, are considered. In the case reports, age, sex, location, pathogenesis, and differential diagnosis are considered. The chief symptoms, although not diagnostic, and some ideas of medical and surgical treatment are given.

Discussion to be opened by R. K. MCHENRY, Houston.

2. *Roentgen Ray Examination of Lesions of the Stomach and Duodenum.*
ROY L. GILES, San Antonio.

Expert roentgen ray examination supersedes all other diagnostic methods in detecting lesions of the stomach and duodenum. The usual experience of the trained roentgenologist is that 80 to 85 per cent of the patients referred for epigastric distress have no roentgen evidence of organic disease of the stomach or duodenum. This presentation deals chiefly with four lesions which are believed to represent 98 per cent of the diseases of the stomach and duodenum—gastritis, gastric malignancy, gastric ulcer, and duodenal ulcer. The differential diagnosis of these and of less frequent lesions, is discussed.

Discussion to be opened by R. T. WILSON, Austin.

3. *A Comparison of Two Cholecystographic Media.*
C. A. STEVENSON and R. N. SMITH, Temple.

In an attempt to compare tetraiodophenolphthalein with priodax, 1,000 consecutive patients were chosen, in whom tetraiodophenolphthalein was given to the first 500 and priodax to the next 500. Each patient was closely questioned in regard to symptoms, and each set of roentgenograms was carefully examined with the idea of comparison in mind. The results of this study will be presented.

Discussion to be opened by PALMER E. WIGBY, Houston.

4. *Roentgen Therapy in the Treatment of Herpes Zoster.*

ROBERT J. REEVES, M. D.
Durham, N. C.
Professor of Roentgenology, Duke University School of Medicine.

A brief discussion of the history of this very disabling condition and enumeration of the various theories which have been given as to its cause. A report of 50 followed cases is given and emphasis is laid on the early treatment. It is a self limited disease which varies greatly in its intensity and severity of the lesions. These facts are kept in mind when attempting to evaluate the effect of the roentgen treatment.

5. *Radiologic Diagnoses of Lesions of the Large Bowel.*
J. R. MAXFIELD, JR., Dallas.

The radiographic findings in various types of lesions of the colon will be given with lantern slide illustrations. The value of radiographic procedures in diagnosis will be stressed and the indications for radiographic study of the colon pointed out. An outline of the type of examination necessary to study completely the large bowel is presented, together with emphasis on the pitfalls of diagnosis in large bowel lesions.

Discussion to be opened by JEROME H. SMITH, San Angelo.

6. *Low Back Pain: The Differential Diagnosis of Protruded Intervertebral Disk by Myelography, With a Report of 50 Operated Cases.*
MORTON L. MAZER, Dallas.

In discussing the refinements of radiological technique and interpretation of myelography the differential diagnosis of many causes of low back pain other than the protruding intervertebral disk will be given. The technique employed for various media will be outlined. Common diagnostic pitfalls will be shown in two groups—false positives and false negatives. The procedure for removal of the medium after the examination will be described.

Discussion to be opened by E. F. LYON, San Antonio.

7. *Problems Confronting the Radiologist in a Small Community.*
WAYNE V. RAMSEY, Abilene.

Because of his frequent consultation with many other branches of medicine, the problems of the radiologist are many and varied. Since the final decision in handling a very serious case fre-

quently lies within the jurisdiction of the radiologist, his best efforts and careful attention are required. Some problems in diagnosis are related. Lantern slides illustrating 12 cases include lesions of the esophagus, stomach, duodenum, pancreas, and colon.

Discussion to be opened by B. M. WORKS, Brownsville.

Wednesday, May 8

9:00 a. m. to 12:00 noon

Anchor Room, Lobby Floor, Hotel Galvez

8. *Intracranial Air Studies in Children.*
MARTIN SCHNEIDER, Galveston.

The problems peculiar to study of the intracranial contents in infants and children are discussed, and its usefulness in evaluating organic changes is indicated with specific examples. Correlation with the clinical problem of each case is particularly stressed. Case histories, encephalograms, and ventriculograms are correlated with operative and necropsy findings from experience at the University of Texas School of Medicine and John Sealy Hospital.

Discussion to be opened by FRANK M. WINDROW, Dallas.

9. *X-Ray Exposure Meters and Automatic Exposure Timers.*
L. M. GARRETT, Corpus Christi.

A historical account of the development of x-ray exposure meters is given. The fundamental elements and circuits used are discussed, in particular photo-electric cells, direct current amplifiers, intensifying screens, and filtration. The use of the x-ray exposure meter in clinical radiography as an exposure meter and in studying various qualities of an x-ray beam is considered. The electric fundamentals underlying the automatic x-ray exposure timer and the timer's application to clinical radiography, particularly of the chest, are discussed.

Discussion to be opened by J. J. FAUST, Tyler.

10. *Mediastinal Tumors.*
MAJOR DONALD L. PAULSON, Fort Sam Houston.

Of the primary intrathoracic neoplasms, mediastinal tumors are second only to bronchogenic tumors in frequency. It is shown how a benign tumor may be potentially malignant, and how important it is to use exploratory thoracotomy for accurate diagnosis in some cases. Twenty-eight patients with mediastinal tumors operated on at Brooke Hospital Thoracic Surgical Center are discussed. The risks of delaying exploration of the thorax are pointed out.

Discussion to be opened by R. P. O'BANNON, Fort Worth.

11. *Eosinophilic Granuloma of Bone.*
CAPT. ROBERT N. COOLEY, Fort Sam Houston, and GLENN D. CARLSON, Dallas.

After a brief review of the literature relative to eosinophilic granuloma of bone, the findings and pertinent features of 10 cases collected by the authors will be presented, with lantern slide illustrations. Included will be etiology, symptomatology, laboratory findings, roentgen findings, clinical course over two to ten year periods, macroscopic and microscopic pathology, and treatment.

Discussion to be opened by R. E. BARR, Beaumont.

12. *Experiences of a Medical Officer in a Jap Prison Camp.*
EMIL P. REED, Dallas.

Medical problems incidental to the campaign of Bataan, the "Death March," and prison life at O'Donnell and Cabanatuan will be presented. It will be shown how the high death rate of American prisoners was markedly reduced after receipt of Red Cross food and medications. Malaria, xerophthalmia, beriberi, pellagra, nutritional edema, and a disease entity called "limber neck" will be discussed. The difficulties of maintaining a hospital with very little equipment will be related.

13. *Sticker Films.*

On arrival, please present your films with a brief essential history, to GLENN D. CARLSON.

SECTION ON PUBLIC HEALTH

Tuesday, May 7

1:30 p. m. to 5:30 p. m.

Jolly Rogers Rooms A and B, Mezzanine Floor, Buccaneer Hotel

Chairman—GEORGE A. GRAY, San Angelo.

Secretary—L. P. WALTER, Austin.

Guest of the Section—REGINALD M. ATWATER, New York, N. Y.

Section Sponsors—CHARLES MARES and WILLIAM D. SHARP, Galveston.

1. *Chairman's Address.*
GEORGE A. GRAY, San Angelo.

Doctor-public relationships can stand improvement. Health units, guided by policies, formulated by local medical societies, can greatly improve such relationships. Proper utilization by the medical profession of services which health units are prepared to render will alleviate most, if not all, of the conditions which lend support to arguments of proponents of socialized medicine. Efforts of the public health nurse constitute the best protection for the community against all forms of charlatanism.

Discussion to be opened by VICTOR E. SCHULZE, San Angelo.

2. *A Five Year Plan for American Public Health.*

REGINALD M. ATWATER, M. D., Dr. P. H.
New York, N. Y.
Executive Secretary, American Public Health Association.

3. *Public Health in Texas.*
GEORGE W. COX, Austin.

4. *The American Public Health Association Evaluation Schedule for Use in the Study and Appraisal of Community Health Programs.*
E. W. PROTHRO, Austin.

Successful maintenance of a public health program depends upon a clear identification of local health problems and wise planning in use of local facilities to meet them. To this end activities of both official and nonofficial agencies indentified in any way with public health must be effectively and harmoniously coördinated. Details of types of surveys are given and their places in full time health programs are discussed. The author tries to show that an evaluation of health facilities, activities, and results of past programs is as necessary as an appraisal by business or professional establishments. It gives the community a concrete idea of health program needs and their costs. It enables a director and his aids to plan more effective programs.

5. *Malaria Control in China.*
FRED K. LAURENTZ, Houston.

Discussion to be opened by L. A. BYERS, Paris.

6. *Water in Relation to Some of the Health Problems in the Children of Texas.*
ARILD E. HANSEN, Galveston.

More children die in Texas than in any other state in the union, even though Texas is sixth in total population. One may assume that one-half the deaths of Texas children are preventable. The number of deaths from typhoid fever has been greatly decreased, but they are still higher than in California and New York. Water borne diseases contribute to some extent. However, diseases in which there are disturbances in water metabolism contribute even more. Conditions such as diarrhea, enteritis, and prematurity contribute greatly to the high death rate during the first year of life. Understanding of water and electrolyte metabolism will help materially to reduce the high death rate.

Discussion to be opened by N. M. ATKINS, Waco.

Wednesday, May 8
8:00 a. m. to 12:00 noon
Jolly Rogers Rooms A and B, Mezzanine Floor, Buccaneer Hotel

7. *The Control of Endemic Typhus Fever in a United States-Mexican Border Town.*
FREDERICK A. MUSACCHIO, Laredo.

A discussion of basic research problems on endemic typhus is presented. The typhus problem on the state and local levels is presented and discussed. In 1945, 1,833 cases were reported from Texas; 51 cases from Laredo. A brief discussion of the typhus control program in Laredo is considered, with a summary of activities for the years 1944 and 1945. Laredo's typhus rate declined 61 per cent in 1945 as compared with that of 1944.

Discussion to be opened by LEWIS C. ROBBINS, San Antonio.

8. *Typhus in Germany.*
WILLIAM S. BRUMAGE, Austin.

This paper presents the incidence of typhus in Germany from an epidemiological aspect from 1939 until July, 1945. A detailed discussion of typhus as it appeared in the prison camps in Germany is given. The typhus control program as set up by the United States Army in Germany during the winter and spring of 1945 is presented.

Discussion to be opened by B. M. PRIMER, Austin.

9. *An Epidemiological Investigation of Typhus Fever in Texas.*
J. V. IRONS, Austin.

In 1945, the 1,833 cases of typhus fever reported in Texas accounted for more than one-third of all such cases reported in the United States. This disease either has been spreading rapidly or has been increasingly recognized in Texas. Recent surveys indicate the majority of rats in many Texas communities have harbored this infection. Poisoning the rats with 1080, after dusting of rat-runs with DDT, is a relatively new but widely used control procedure.

Discussion to be opened by RALPH JENKS, Greenville.

10. *House to House Inspections and General Sanitation.*
AUSTIN E. HILL, Houston.

House to house inspection of private premises for all types of sanitation, an out-growth of the dengue fever control program inaugurated in 1942 by the U. S. Public Health Service, averted a dengue fever epidemic and reduced typhus, typhoid, and dysentery in Houston during 1945. Houston, one of four cities trying this program, found that such inspection eliminates health hazards not found otherwise, offers individual education to householders, and furnishes spot map information regarding insanitary conditions.

Discussion to be opened by W. L. KITCHENS, San Benito.

11. *The Problem of Chagas' Disease in the State of Texas.*
A. PACKCHANIAN, PH. D., Galveston.

Discussion to be opened by S. W. BOHLS, Austin.

12. *Discussion of Proposed Combined City and County Health Departments.*
HORACE E. DUNCAN, Dallas.

(1) The reasons for proposing a combination of health facilities in Dallas County, listing the expected benefits. (2) The obstacles, legal and otherwise, necessary legislation for desirable consummation, with emphasis on a proper division of responsibilities, civil service status, and a special method of finance. (3) The experience of combined units in other states, together with recommendations that have come from interested individuals, professional organizations, and official agencies of the City and County of Dallas.

13. *Relationship of Alcoholism to Public Health.*
W. B. NIES, Fort Worth.

At this time the public is reading and hearing a great deal about alcoholism. The National Committee on Alcoholism is sponsoring an extensive educational program, recommending clinics, hospital care, and rehabilitation for alcoholics. The Alcoholics Anonymous, who have organizations in all major cities, are makiug rapid strides in rehabilitation. The hope of the Committee is that the alcoholic who is sick may be restored to health. The Alcoholics Anonymous members are making rapid strides in helping the alcoholic to regain his health.

Discussion to be opened by M. L. FULLER, Mineral Wells.

SECTION ON CLINICAL PATHOLOGY

Tuesday, May 7
1:30 p. m. to 5:30 p. m.
Directors' Room, Lobby Floor, Hotel Galvez

Chairman—JOHN F. PILCHER, Corpus Christi.
Secretary—WILLIAM N. POWELL, Temple.
Guest of the Section—WILEY D. FORBUS, Durham, N. C.
Section Sponsors—H. H. SWEET, JR., and NORMAN D. SCHOFIELD.

1. *Chairman's Address.*
J. F. PILCHER, Corpus Christi.

2. *The Frog Test for Pregnancy.*
C. B. SANDERS, Houston.

Females of the African clawed frog, Xenopus laevis, when injected with concentrates of urine from pregnant women, will lay eggs within four to eighteen hours. Injection of urine concentrates from nonpregnant women will not cause eggs to be laid. This test is highly accurate, and the author considers it superior to other pregnancy tests he has employed.

Discussion to be opened by ELLEN D. FUREY, Beaumont.

3. *Brenner Tumor of Ovary.*
JOHN J. ANDUJAR, GEORGE R. ENLOE, and WILLIAM B. SWIFT, Fort Worth.

Postmenopausal hemorrhage is occasionally due to extrauterine factors. However, only 3 of the reported 161 cases of Brenner tumor have been associated with uterine hemorrhage. An additional 2 cases are here reported. It is probable that the association is coincidental, but the almost unanimous opinion that Brenner tumor is never associated with hormonal disturbances may well be reexamined if additional cases of this type are reported.

Discussion to be opened by J. L. GOFORTH, Dallas.

4. *Granulomatous Inflammation.*

WILEY D. FORBUS, M. D.
Durham, N. C.
Professor of Pathology, Duke University School of Medicine; Pathologist, Duke, Watts, and Lincoln Hospitals; Associate Editor, Archives of Pathology.

A general pathologic consideration of granulomatous inflammation, with particular emphasis upon the specific chemotaotic properties of certain etiologic factors for the cells of the reticulo-endothelial system. A reorientation of the pathogenic problems involved in the granulomatous diseases, particularly those produced by some of the more important fungi. A brief statement of the general pathologic significance of granulomatous inflammation.

5. *Talc Granuloma.*
STUART A. WALLACE, Houston.

The injurious effects of silica are discussed, with particular reference to the peritoneal lesions produced by talcum powder which is slightly impure hydrous magnesium silicate. The lesions are granulomatous with foreign body giant cells in which can be seen the particles of talc. A case is presented of a patient who had two previous abdominal operations following each of which local talc granulomas developed.

Discussion to be opened by MAY OWEN, Fort Worth.

6. *The Ordinary Nonpigmented Mole: Just How Innocent Is It?*
CHARLES PHILLIPS, Temple.

For fifty years well informed students of the skin and derived tumors have indicated that moles are potentially important lesions. Gradually attention has become focused on

pigmented moles because so many melanomas have been traced to them. The fallacy that nonpigmented moles are innocent is presented in this paper by reference to many reported cases of nonmelanotic melanomas in the literature, the genesis of the nevus cells and their derived tumors, and by a study of a series of 25 nonmelanotic melanomas from the records of about 165 melanomas recorded at Scott and White Hospital over the past twenty years.

Discussion to be opened by A. O. SEVERANCE, San Antonio.

7. *Recent Advances in* Rh *Testing.*
SOL HABERMAN, PH. D., Dallas.

New *Rh* technics are presented, particularly the use of "developing serum" as a means of identifying the *Rh* antibodies and in the diagnosis of erythroblastosis. The evaluation of data from general work is presented.

Discussion to be opened by WILLIAM C. LEVIN, Galveston.

8. *Pathologic Basis for Cardiac Valvular Disease.*
C. T. ASHWORTH, Dallas.

Both inflammatory and degenerative cardiac valvular disease are discussed, with slides illustrating the gross and microscopic characteristics. Particular reference is made to the following anatomical valve derangements: commissural bridging, marginal fusion, valvular fibrosis, contraction, lipoid depositions in mitral and aortic valves, and calcification of valves and valve rings.

Discussion to be opened by NORMAN D. SCHOFIELD, Galveston.

Wednesday, May 8

9:00 a. m. to 12:00 noon

Room 207, Laboratory Building, University of Texas School of Medicine

9. *Clinical and Pathological Conference.*
PAUL BRINDLEY, Galveston; STUART A. WALLACE, Houston; and A. J. GILL, Dallas.

SECTION ON PEDIATRICS

Tuesday, May 7

1:30 p. m. to 5:30 p. m.

Private Dining Room, Mezzanine Floor, Buccaneer Hotel

Chairman—M. C. CARLISLE, Waco.

Secretary—ROBERT L. MOORE, Dallas.

Guest of the Section—JAMES L. WILSON, Ann Arbor, Mich.

Section Sponsors—ARILD E. HANSEN and BOYD READING, Galveston.

1. *Prostigmine Usage in Pediatrics.*
GUY TITTLE, Dallas.

Review of the literature of the past three years and report of the author's experience with this drug in the treatment of spastics, hearing defects, and encephalitis.

Discussion to be opened by JAMES H. PARK, Houston.

2. *The* Rh *Factors in Hemolytic Disease of the Newborn.*
J. A. NUNN, San Antonio.

Review of the literature in an effort to present the most salient facts that are of interest to the clinician. A definition is given. The combination of marriage which results in hemolytic diseases is discussed. The incidence and other factors in the production of the disease are presented. Treatment and prohylaxis are presented. Kernicterus is briefly discussed.

Discussion to be opened by SOL HABERMAN, PH. D., Dallas.

3. *Congenital Esophageal Atresia with Tracheo-Esophageal Fistula.*
WILLIAM H. BRADFORD, Dallas.

A report of 2 cases, in which 1 patient survived over a year postoperatively, and a review of 4 additional cases previously reported by the author.

Discussion to be opened by ROBERT SHAW, Dallas.

4. *Absorption of Protein and Protein Hydrolysates in Nutritional Diseases in Infants with Particular Relation to Diagnosis and Treatment of Cystic Fibrosis of the Pancreas.*

JAMES L. WILSON, A. B., M. D.
Ann Arbor, Mich.
Professor of Pediatrics, University of Michigan Medical School; Chairman, Department of Pediatrics and Communicable Diseases. University Hospital of Michigan.

5. *Subclinical Hypothyroidism.*
SIDNEY R. KALISKI, Houston.

Discussion of a condition occurring in childhood in which there is neither cretinism nor myxedema, but characterized by mental and physical languor and sometimes by behavior abnormalities. Diagnosed by roentgen ray evidence of delayed ossification and epiphyseal dysgenesis and by response to thyroid medication.

Discussion to be opened by RAMSAY MOORE, Dallas.

Wednesday, May 8

8:00 a. m. to 12:00 noon

Private Dining Room, Mezzanine Floor, Buccaneer Hotel

6. *Endocrine Problems in Childhood.*
MAY AGNES HOPKINS, Dallas.

Since the pathologic conditions caused by endocrine deficiencies manifest their clinical symptoms in babyhood and childhood, these problems belong in the field of pediatrics. Their recognition and treatment in childhood will prevent many later incapacitating manifestations which, if neglected, may be beyond remedial therapy. A new preventive field in pediatrics may be developed. A discussion of more commonly seen childhood endocrinopathies, such as hypothyroidism, hypopituitarism, cryptorchism, and hirsutism, is given.

Discussion to be opened by HARRIS HOSEN, Beaumont.

7. *Posthypoglycemic Encephalopathy.*
GEORGE M. JONES, Dallas.

Posthypoglycemic encephalopathy is a definite clinical entity, characterized by residual or permanent cerebral damage after a hypoglycemic episode. Two such cases will be presented, and the physiologic and pathologic changes and literature on the subject will be reviewed.

Discussion to be opened by GLADYS FASHENA, Dallas.

8. *What the Future Promises to the Infant Subjected to Agglutinins from Isoimmunization of Its Mother.*
ALLAN BLOXSOM, Houston.

A review of the accumulated literature which shows that erythroblastosis fetalis does not always occur and the steps that may be taken to lessen its severity.

Discussion to be opened by BOYD READING, Galveston.

9. *Eosinophilic Granuloma.*
FRANCES LOVE, Dallas.

A discussion of the relationship between eosinophilic granuloma of bone and Hand-Schüller-Christian disease with report of a case with solitary granuloma of mandible later associated with some of the symptoms of the latter and diagnosed by histological studies.

Discussion to be opened by JAMES H. PARK, Houston.

10. *Jaundice in the Newborn Infant.*
GEORGE W. SALMON, Houston.

An outline of the etiology and symptomatology of the various forms of jaundice in the newborn period. Case illustrations.

Discussion to be opened by MAX WOODWARD, Sherman.

11. *Penicillin Therapy in Children with Syphilis.*
DOROTHY WYVELL, Dallas.

A brief review of the literature, presentation of cases, and discussion.

Discussion to be opened by ARILD E. HANSEN, Galveston.

12. *Choice of Vaccines and Age of Immunization in Whooping Cough.*
WALLACE SAKO, Galveston.

The effect of age on the agglutinin response to pertussis immunization and the comparative value of the types of pertussis vaccine (fluid, alum precipitated, or aluminum hydroxide adsorbed) on the agglutinin response of 12,364 children.

Discussion to be opened by T. J. MCELHENNEY, Austin.

Officers, Committees, and Announcements

OFFICERS

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DELEGATES TO A. M. A.

Holman Taylor, Fort Worth (term expires).
F. J. L. Blasingame, Wharton (term expires).
H. R. Dudgeon, Waco (one year).
B. E. Pickett, Carrizo Springs (one year).
E. H. Cary, Dallas (one year).

ALTERNATES

R. B. Anderson, Fort Worth (term expires).
L. H. Reeves, Fort Worth (term expires).
E. W. Bertner, Houston (one year).
H. Leslie Moore, Dallas (one year).
A. C. Scott, Temple (one year).

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W. L. Baugh, Lubbock (one year).
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EXECUTIVE COUNCIL

Ex-officio, the President (Chairman), and the Secretary (Secretary of the Association); President-Elect, Vice-Presidents, Board of Trustees, Board of Councilors, and the Legislative Committee.

COUNCIL ON SCIENTIFIC WORK

Ex-officio, the President and Secretary and Officers of Scientific Sections.
A. C. Scott, Chairman, Temple (two years).
R. B. Alexander, Waco (four years).
J. S. McCelvey, Temple (three years).
Tom G. Glass, Marlin (one year).
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H. E. Griffin, Chairman, Graham (three years).
H. R. Dudgeon, Waco (four years).
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W. F. Starley, Galveston (one year).
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Holman Taylor, Secretary (ex-officio), Fort Worth.
*J. Allen Kyle, Houston (four years).
Joe Gilbert, Austin (three years).
N. D. Buie, Marlin (one year).
L. H. Reeves, Fort Worth (term expires).

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†Vacancy (one year).
D. J. Jenkins, Daingerfield (term expires).

*SECRETARY'S NOTE.—Vacancy originally existed because of election by the House on nomination from the floor instead of confirmation of appointee of President-Elect, as provided by Sec. 8 (A-5) of the By-Laws of the Association. The appointment by the President of Dr. O. F. Gober, of Temple, was approved by the Executive Council. Therefore, upon the death of Dr. Gober, the appointment by the President of Dr. J. Allen Kyle, of Houston, to fill the vacancy, was recognized.

†Vacancy created by death of Dr. H. H. Ogilvie, of San Antonio.

COMMITTEE ON CANCER

E. W. Bertner, Chairman, Houston (two years).
George T. Caldwell, Dallas (four years).
Frank C. Beall, Fort Worth (three years).
A. A. Ross, Jr., Lockhart (one year).
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COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION

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Lee Rice, San Antonio (two years).
DeWitt Neighbors, Fort Worth (one year).

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Committee on Memorial Exercises.—W. L. Crosthwait, Chairman, Waco; John R. deSteiguer, San Marcos; James W. Ward, Greenville; Hobart Y. Lacy, Pittsburg; James Greenwood, Houston.

Committee on Scientific Exhibits.—X. R. Hyde, Chairman, Fort Worth; Charles Phillips, Temple; T. P. Churchill, Amarillo; J. P. McAnulty, San Angelo; W. L. Marr, Galveston.

Committee on Medical Education and Hospitals.—Raymond L. Gregory, Chairman, Galveston; F. R. Rugeley, Wharton; C. C. McDonald, Tyler; J. Peyton Barnes, Houston; J. C. Thomas, Austin.

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Advisory Committee to Woman's Auxiliary.—A. B. Pumphrey, Chairman, Fort Worth; Sam R. King, El Paso; R. Q. Hunter, Palestine; Joe Gilbert, Austin; Thomas L. Denson, Cameron.

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Committee on Fractures.—Charles E. Collins, Chairman, Waco; Julius T. Kreuger, Lubbock; Earl H. Newton, Corsicana; Joe B. Foster, Houston; William M. Gambrell, Austin.

Committee on Maternal and Child Health.—Roy L. Grogan, Chairman, Fort Worth; H. Leslie Moore, Dallas; David Greer, Houston; D. H. Hudgins, Forney; H. C. Eckhardt, Yorktown.

Committee on Tuberculosis.—R. G. McCorkle, Chairman, San Antonio; R. B. Holman, Jr., El Paso; C. B. Taylor, Gainesville; Harvey Renger, Hallettsville; J. S. Wootters, Crockett.

Committee on Venereal Diseases.—Thomas M. Jarmon, Chairman, Tyler; A. A. Terry, Austin; W. F. Hasskarl, Brenham; R. K. Harlan, Temple; A. G. Barsh, Lubbock.

Committee on Industrial Health.—Jack Furman, Chairman, Fort Worth; Carl McCurdy, Marshall; Richard Keys, Amarillo; J. W. Simons, Newgulf; M. M. Brown, Mexia.

Committee on Malaria.—George R. Herrmann, Chairman, Galveston; Vacancy*; Louis P. Good, Texarkana; Charles A. Schoultz, Bay City; J. C. Bradford, Mart.

Committee on Pneumonia.—David W. Carter, Jr., Chairman, Dallas; B. A. Mosley, Victoria; Nan L. Gilkerson, Amarillo; Fred E. Felder, Palestine; M. F. Kreisle, Austin.

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Liaison, Lone Star State Medical, Dental and Pharmaceutical Association.—Ex-officio, the President, Secretary, Chairman Board of Trustees, Chairman Board of Councilors, and Chairman Council on Medical Economics.

Advisory Council of Past Presidents.—All of the Past Presidents of the State Medical Association.

LOCAL COMMITTEES

General Arrangements.—Dick P. Wall, Chairman; John McGivney, W. C. Fisher, Jr., Edward R. Thompson, and Raymond Gregory.

Reception.—William L. Marr, Chairman; William T. Anderson, F. W. Aves, George Beeler, Paul Brindley, M. A. Caravageli, Duncan Danforth, G. W. N. Eggers, W. C. Fisher, Jr., Francis Garbade, Arild Hansen, Titus H. Harris, W. J. Jinkins, G. Mason Kahn, Joseph Magliolo, Charles F. Mares, R. M. Moore, S. M. Morris, George McReynolds, Edward Randall, Jr., Boyd Reading, M. L. Ross, Henry A. Schmidt, A. O. Singleton, S. R. Snodgrass, William Spiller, and W. S. Starley.

Clinical Luncheons.—John L. Otto, Chairman; W. R. Cooke, Raymond L. Gregory, Arild Hansen, Charles A. Hooks, R. M. Moore, George McReynolds, William B. Potter, H. Reid Robinson, and Harvey Slocum.

Transportation.—Hughes Gilliam, Chairman; M. A. Caravageli, A. J. Jinkins, W. G. Kolb, A. Magliolo, and Bernard Perlman.

Golf.—Edward Randall, Jr., Chairman; R. E. Cone, W. R. Cooke, B. R. Parrish, W. W. Stephens, C. T. Stone, and Clarence Sykes.

Finance.—Titus H. Harris, Chairman; Paul Brindley, George M. Decherd, Ben P. Fleming, Jesse B. Johnson, Emil H. Klatt, George T. Lee, Joseph Magliolo, and William Spiller.

Memorial.—E. B. Ritchie, Chairman; Theodore McC. Frank, William B. Potter, Clarence Quinn, and William F. Starley.

Information.—M. L. Ross, Chairman; Carroll Adriance, Wade L. Hoecker, Norman D. Jarrell, William C. Levin, G. R. Manske, W. F. McKinley, and Herman Weinert.

Scientific Exhibits.—Edgar J. Poth, Chairman; John Delany, Chester N. Frazier, George Herrmann, Robert Roland, Arthur Ruskin, Harvey Slocum, H. H. Sweets, Jr., and Weldon White.

Technical Exhibits.—Edward J. Lefeber, Chairman; Nicholas Andronis, H. Reid Robinson, and Lou Tomlinson.

Public Lectures.—C. T. Stone, Chairman; Raymond L. Gregory, D. J. Herrington, Charles F. Mares,

*Vacancy created by death of Dr. O. F. Gober, of Temple.
†Vacancy created by death of Dr. Judson L. Taylor, of Houston.

John McGivney, Edward Randall, Jr., and Edward H. Schwab.

Publicity.—William B. Sharp, Chairman; Paul Brindley, George T. Lee, Leonard Twidwell, and Stephen Weisz.

Hotels.—E. S. McLarty, Chairman; Hamilton Ford, Emil Klatt, Charles F. Mares, and N. Prujansky.

Entertainment.—W. S. Wallace, Chairman; John Delany, Titus H. Harris, J. L. Jinkins, George McReynolds, Edward Randall, Jr., Edward Thompson, and Herman Weinert.

Halls and Lanterns.—Jack R. Ewalt, Chairman; Norman D. Schofield, Fred W. Shelton, Clarence Sykes, John Thiel, and Weldon White.

Alumni Banquets.—George Herrmann, Chairman; Virginia Blocker (AET), A. Magliolo (NSN), Hamilton Ford (PBP), Herman Weinert (PC), H. Roosth and Alfred Tocker (PDE), Edward Schwab and Burt Breath (PRS), Capt. Milton Laughlin (TKP), and Sam Barnes (AKK).

SECTION SPONSORS

Medicine.—Stephen Weisz and George Decherd.

Surgery.—F. W. Aves and S. R. Snodgrass.

Obstetrics and Gynecology.—J. L. Jinkins and H. Reid Robinson.

Eye, Ear, Nose, and Throat.—George S. McReynolds and William B. Potter.

Radiology and Physiotherapy.—Jesse B. Johnson and Chester N. Frazier.

Public Health.—Charles Mares and William D. Sharp.

Clinical Pathology.—H. H. Sweet, Jr. and Norman D. Schofield.

Pediatrics.—Arild E. Hansen and Boyd Reading.

ANNOUNCEMENTS

All of the scientific activities of the annual session will be housed in Hotel Galvez, with three exceptions. The Section on Public Health will meet in Jolly Rogers Rooms A and B, Mezzanine Floor, Buccaneer Hotel. The Section on Pediatrics will meet in the Private Dining Room, Mezzanine Floor, Buccaneer Hotel. The Section on Clinical Pathology will hold its meeting Wednesday morning, May 8, in Room 207, Laboratory Building, University of Texas School of Medicine; its meeting Tuesday afternoon, May 7, will be in Hotel Galvez.

The Registration Office will be located on the Lobby Floor of Hotel Galvez. Members, medical visitors, and guests should register here immediately upon arriving in the city and obtain badges and programs.

The Information Bureau will be located adjacent to the Registration Office on the Lobby Floor of Hotel Galvez. Tickets and information concerning the Clinical Luncheons will be available here. Address telegrams, telephone calls, and mail to the Information Bureau, State Medical Association, Hotel Galvez during the period of the annual session. Special facilities will be provided at the Information Bureau, Hotel Galvez, during the annual session, so that excellent telephone information service will be available to registrants.

The Woman's Auxiliary will have its headquarters at the Buccaneer Hotel, one block from Hotel Galvez. Courtesy and information committees from the Woman's Auxiliary to the Galveston County Medical Society will be on duty in the Buccaneer and Galvez Hotels. All ladies in attendance on the annual session will please register and obtain badges and programs from the Registration Bureau on the Mezzanine Floor of the Buccaneer Hotel immediately upon arriving in the city.

The Committee on Hotels will establish hotel information services in connection with the Information Bureau of the State Medical Association on the Lobby Floor of Hotel Galvez. Anyone in attendance on the annual session in need of help in connection with hotel accommodations will be gladly served.

The House of Delegates will meet in the Basement Room, Basement of Hotel Galvez. The first session will be held Monday, May 6, at 10:00 a. m.

The Board of Councilors will hold its meetings in Room 438, Hotel Galvez.

The Opening Exercises will be held in the Ballroom of Hotel Galvez at 9:00 a. m., Tuesday, May 7.

The Memorial Services will be held from 5:15 to 6:15 p. m., Wednesday, May 8, in the Ballroom of Hotel Galvez.

The President's Reception and Ball will be held in the Ballroom of Hotel Galvez, Tuesday, May 7, at 9:15 p. m. All members of the Association, guests, and visitors are invited.

The Clinical Luncheons will be held from 12:45 to 2:45 p. m., Wednesday, May 8, and from 12:15 to 2:15 p. m., Thursday, May 9. There will be three sectional luncheons on Wednesday, namely, Medicine and Pediatrics; Surgery, Obstetrics and Gynecology, and Eye, Ear, Nose, and Throat. There will be only one Clinical Luncheon on Thursday, the Combined Sections Luncheon. Tickets for the luncheons will be obtained from the Information Bureau. The cost of tickets to a luncheon will be $1.75.

The Medicine and Pediatrics Luncheon, Wednesday, will be held in the Ballroom, Lobby Floor, Hotel Galvez.

The Surgery, Obstetrics, and Gynecology Luncheon, Wednesday, will be held in the Terrace Dining Room, Lobby Floor, Hotel Galvez.

The Eye, Ear, Nose, and Throat Clinical Luncheon, Wednesday, will be held in the Basement Room, Basement, Hotel Galvez.

The Combined Sections Luncheon, Thursday, will be held in the Terrace Dining Room, Lobby Floor, Hotel Galvez.

Alumni Banquets will be held from 6:00 to 8:30 p. m., Tuesday, May 7.

The University of Texas Medical Branch Alumni Banquet will be held in the Ballroom of the Buccaneer Hotel. Tickets will be on sale, but reservations should be made in advance, if possible, by notifying Miss Mildred Robinson, University of Texas Medical Branch, Galveston.

Fraternity Banquets will be held from 6:30 p. m. to 7:45 p. m. on Wednesday, May 8.

Alpha Kappa Kappa Fraternity plans to have a banquet at the chapter house, 1426 Avenue E. Those who expect to attend should notify Dr. Sam Barnes, John Sealy Hospital, Galveston.

Nu Sigma Nu Fraternity will have a banquet in the Terrace Dining Room, lobby floor, of the Hotel Galvez. Dr. Andrew Magliolo, of Dickinson, and Mr. D. K. Boyd, of the active chapter at the University of Texas School of Medicine, Galveston, are making the arrangements and should be contacted for information.

Phi Beta Pi Fraternity is planning a banquet. Those who wish to attend should notify Dr. Hamilton Ford, John Sealy Hospital, Galveston, or Mr. Emil Carroll at the chapter house in Galveston.

Phi Chi Fraternity plans to hold a founders day banquet at the fraternity house, 606 Boulevard. Those expecting to attend should notify Dr. Herman

Weinert, U. S. National Bank Building, Galveston, or Mr. Joe Steed at the fraternity house in Galveston.

Phi Delta Epsilon Fraternity will have a banquet at the chapter house, 1426 Market Street. Those who wish to attend should contact Dr. Harold Roosth, John Sealy Hospital, Galveston.

Phi Rho Sigma Fraternity banquet will be held in Private Dining Rooms 1, 2, and 3, Hotel Galvez. Reservations should be made with Dr. John Otto or Dr. Burt Breath, John Sealy Hospital, Galveston.

Theta Kappa Psi Fraternity will have a banquet at the chapter house, 918 Avenue G. Arrangements are being made by Capt. Milton Laughlin, Fort Crockett, and Dr. John Cox, John Sealy Hospital, Galveston, to whom communications should be addressed.

Dr. Geŏrge R. Herrmann, University of Texas School of Medicine, Galveston, chairman of the committee on alumni banquets, will be glad to assist with arrangements for any alumni or fraternity group desiring to hold a banquet.

Golf.—The Annual State Association Golf Tournament will be held at the Galveston Country Club. As in the past, play in this Tournament may occur on any three days of the annual session. If a member plays more than once, he may turn in his best score. Prizes will be awarded for the low gross medal score and also for low net scores. For this purpose, the player should bring his official handicaps from the home professional. Full particulars concerning the Golf Tournament may be obtained at the Information Bureau of the State Medical Association at the Hotel Galvez.

HOTELS AND TOURIST COURTS

Galveston Hotels

Hotel	*Rates*
Buccaneer	
Galvez	
Jean LaFitte	Double, $3.75-$6.00

Galveston Tourist Courts

Court	
Coronado	2 persons, $4.00 1-bedroom apt. (for 2), $4.65 2-bedroom apt. (for 2 or 4), $6.70
Jack Tar	double room, $4.50-$6.50 2-bedroom apt. (for 4), $10.85-$12.50 1-bedroom apt. (for 2), $6.50
Miramar	2 persons, $3.65-$4.65 2-bedroom apt. (for 2 or 4), $6.00

SCIENTIFIC SECTIONS

The places of meeting of the scientific sections will be as follows:

Section on Medicine, Ballroom, lobby floor, Hotel Galvez.

Section on Surgery, Terrace Dining Room, lobby floor, Hotel Galvez.

Section on Obstetrics and Gynecology, Private Dining Rooms 1, 2, and 3, lobby floor, Hotel Galvez.

Section on Eye, Ear, Nose, and Throat, Basement Room, basement, Hotel Galvez.

Section on Radiology and Physiotherapy, Anchor Room, lobby floor, Hotel Galvez.

Section on Public Health, Jolly Rogers Rooms A and B, mezzanine floor, Buccaneer Hotel.

Section on Clinical Pathology, Directors' Room, lobby floor, Hotel Galvez, on Tuesday afternoon, May 7; Room 207, Laboratory Building, University of Texas School of Medicine, on Wednesday morning, May 8.

Section on Pediatrics, Private Dining Room, mezzanine floor, Buccaneer Hotel.

Scientific Exhibits

The scientific exhibits will be displayed on the East Terrace, Lobby Floor, Hotel Galvez. The section on scientific exhibits will be somewhat small this year because of the inability of the exhibitors to prepare exhibits under war pressure. We are fortunate enough, however, to have a few exhibits, all of which are unusual and interesting.

Motion pictures will be exhibited continuously on the Lobby Floor of Hotel Galvez, adjoining the Registration Office.

A list of exhibitors follows:

American Cancer Society: "Cancer Is Curable."

Keller Doss, Fort Worth: "Translumbar Aortography."

G. W. N. Eggers, Galveston: "The Contact Splint."

Lewis W. Helfer, San Antonio: "X-Ray Findings in Neurological Disorders."

Karl John Karnaky, Houston: "Gynecological Anatomy."

Cecil O. Patterson, Dallas: "The Injection Treatment of Esophageal Varices."

A. O. Singleton and Paul Brindley, Galveston: "Surgical Conditions of the Lung."

George L. Waldbott, Detroit, Mich.: "Wheezing—That's Not Asthma."

Motion Pictures

Becton, Dickinson & Company, Rutherford, N. J.: (1) "Continuous Caudal Analgesia."

British Information Services, Houston: (1) "Accident Services;" (2) "Surgery in Chest Diseases;" (3) "The Story of DDT;" (4) "Your Children's Eyes."

Ray K. Daily, Houston: (1) "Methods of Cataract Extraction."

Karl J. Karnaky, Houston: (1) "Female Anatomy;" (2) "Floraquin;" (3) "Monilia Albicans: its Diagnosis and Treatment;" (4) "Possible Use of Kymographic Tracing Instead of Endometrial Biopsy for Determination of Ovulation;" (5) "Sterility in the Human;" (6) "Studies in Human Fertility;" (7) "Trichomonas Vaginalis and Leukorrhea."

Mead Johnson & Company, Evansville, Ind.: (1) "Appraisal of the Newborn;" (2) "Erythroblastic Anemia;" (3) "Normal Delivery;" (4) "Preparation of Human Serum;" (5) "When Bobby Goes to School."

John R. Phillips, Houston: (1) "Cholecystectomy;" (2) "Splenectomy."

TECHNICAL EXHIBITS

The technical exhibits will be displayed on the lobby floor of the Hotel Galvez, headquarters for the annual session. These exhibits provide much of educational value for the physician. Without the armamentarium furnished by the concerns which exhibit at annual sessions, doctors would be seriously handicapped in the practice of scientific medicine. These exhibits are worth all the time and attention registrants at the session can give them. They should be visited without fail.

The list of exhibitors follows:

Books

The C. V. Mosby Company extends a cordial invitation to visit booth 28, where medical publications of timely interest will be displayed. The representa-

tive, Mrs. S. G. Cooke, will be glad to discuss your book needs with you.

The W. B. Saunders Company, represented by their southern agents, **J. A. Majors Company** of Dallas and New Orleans, Mr. L. Shaver in charge, will occupy booths 35 and 36. This publishing house will exhibit its complete line of books, and all attending the meeting are respectfully invited to visit the exhibit without obligation. Among the newer and important books to be shown are Bockus' three volume work on Gastroenterology (now complete); the new fifth edition of Beckman's Treatment; Jackson and Jackson's Diseases of the Nose, Throat, and Ear; the new fourth edition of Mitchell and Nelson's Pediatrics, and many others.

Dietetic Supplies

The Borden Company invites you to spend a few minutes at booth 17—to refresh your memory on their prescription products—to meet the new concentrated Biolac; New Improved Dryco with is formula flexibility; Mull-Soy for your milk allergic patients; powdered whole milk Klim; the improved milk sugar, Beta Lactose; and the Merrell-Soule Protein and Lactic Acid Milks. Borden men are pleasant men!

Mead Johnson & Company reminds that "*Servamus Fidem*" means "We Are Keeping the Faith." Almost every physician thinks of Mead Johnson & Company as the maker of Dextri-Maltose, Pablum, Oleum Percomorphum, and other infant diet materials—including the new precooked oatmeal cereal, Pabena. But not all physicians are aware of the many helpful services this progressive company offers physicians. The company therefore believes a visit to booths 13 and 14 will be time well spent.

Paley-Sachs Food Company, Houston, Texas, will exhibit in booth 6, Mrs. Paley's Baby Food—a complete line of strained fruits, vegetables, soups, and meat products. Made in Texas from home grown vegetables, they are noted for palatability, are rich in calories and mineral salts, and exceptionally rich in iodine. These fine foods are packed in Houston with the utmost attention to quality. Mr. Ben Golub and Mr. Benjamin Leff will be in attendance at the exhibit.

Instruments, Apparatus, and Supplies

A. S. Aloe Company in booth 27 will show a cross-section of its complete line of surgical and laboratory instruments, equipment, and supplies. Featured will be a display of government surplus specials of standard merchandise at exceptionally low prices, along with the regular Aloe line of stainless steel surgical instruments and equipment. Aloe resident Texas representatives will be on hand to welcome their friends.

J. E. Hanger, Inc. have been manufacturing replacement arms and legs since 1861. They have a fully equipped Hanger factory at Dallas, where only the most skilled Hanger trained mechanics are employed, and where the limbs are built, fitted, and finished. They invite you to visit their exhibit in booth 18 of models of replacement arms and legs, and give them the name of any patient you wish them to contact.

The Tol. Higginbotham & Company, manufacturers and marketers of scientifically designed children's items under the *Lit'l Tyke* trade mark, will exhibit a complete line of their *Lit'l Tyke* Trainer in booth 41. The item has outstanding advantages for the functional training of infants in physiotherapeutic and other health protective aspects, and a representative will be on hand to furnish complete information, explain the item to all interested persons, and distribute literature. It is believed by the company that the exhibit will be of great interest to all professional men and women engaged in the treatment and development of children.

Holland-Rantos Company, Inc., New York, Chicago, and Los Angeles, cordially invites you to visit booth 38, where on display will be the nationally known and universally used Koromex contraceptive specialties. Besides the new Koromex Set Complete, which is a package combining the necessary items for complete contraceptive technique, will be the new Nylmerate Jelly, introduced only a short time ago and received enthusiastically for the treatment of trichomoniasis and vaginal discharges of a non-specific origin.

Representatives of the company will be on hand to answer all questions. Samples of Nylmerate Jelly and Koromex Jelly will be available, as will copies of the Dickinson-Freret Chart.

The Hygeia Nursing Bottle Co. cordially invites you to visit booth 37 to see the advantages of the new improved Hygeia Nursing Bottle Unit. Learn why prescribing the Hygeia unit—including bottle, nipple, and cap, will help mothers overcome feeding problems. Mr. Charles H. Clark will be in attendance.

The Karmac Company, booth 41, makes Karmac plaster of paris bandages by hand, in Dallas. Karmac bandages are made in all standard widths and lengths. These plaster bandages soak quickly—make a hard, light-weight, quick setting cast. Karmac casts are made with a *minimum number of bandages.*

W. A. Kyle Company of Houston, in booth 16, will display the very latest model of short wave diathermy apparatus and cold quartz ultra lights, in addition to a complete line of stainless steel surgical instruments.

Luzier's Fine Cosmetics and Perfumes will be exhibited in booth 29. These preparations are selected to suit individual requirements and preferences. They are free from common offenders, such as orris root and rice starch. In specific cases, raw materials may be had for patch testing, and usually the formulas can be modified to exclude ingredients to which the subject is allergic.

E. H. McClure Company, Dallas, will have on display in booth 33, stainless steel surgical instruments, diagnostic instruments, office sterilizers, and examining lights.

The Mennen Company will exhibit in booth 32 their two baby products—Mennen Antiseptic Baby Oil and Mennen Antiseptic Baby Powder, in addition to their fungicidal foot powder—Quinsana. The Antiseptic Oil is now being used routinely in the majority of hospitals that are important in maternity work.

V. Mueller & Company, Chicago, will feature a number of the special instruments for some of the newer operative techniques in its exhibit in booth 4. The display will also include many representative samples from a complete line of standard instruments for every field of surgery. Mr. Ford Dixon, Texas representative of V. Mueller & Company, will be in charge.

Pendleton & Arto, Inc. cordially invite you to attend booths 23 and 24. There you will find a complete Ritter Eye, Ear, Nose, and Throat Unit. You will also find complete information on furniture, equipment, and supplies. Your own Pendleton & Arto representatives will be there to serve you.

Terrell Supply Company, Fort Worth, in booths 8 and 9, will display Birtcher's electrosurgical equipment, Heidbrink's anesthesia apparatuses, and a line of both American-made and Stille Swedish-made stainless steel surgical instruments. Messrs. O.

Coffman, T. S. Curtis, and T. H. Gothard will be in charge of the booths.

The Max Wocher & Son Co., manufacturers of clinic and hospital equipment and supplies, will have a display in booth 20.

Insurance

The Medical Protective Company of Fort Wayne, Indiana, has maintained leadership in the field of malpractice protection since 1899. Specialized service from that company's exclusive application to this one field coordinates a knowledge of medical problems with a knowledge of law that brings obvious advantages to the physician and the protection of his interests that are not obtainable elsewhere. Literature describing the company's coverage and service will be available at booth 7.

Pharmaceuticals and Biologicals

Bilhuber-Knoll Corp., booth 12, will display medicinal chemicals which are frequent components of useful prescriptions. They include Bromural, Dilaudid, Metrazol, Octin, Theocalcin, and other dependable products, each adaptable to individualized prescriptions—alone or in conjunction with other drugs as the needs of each patient may demand. Visit them for the latest information on these everyday prescription chemicals.

Cutter Laboratories will present for your inspection, in booth 39, the new complete line of pediatric immunizing agents featuring the "triple vaccine," Cutter—D. P. T. Another Cutter "first," THE HUMAN BLOOD FRACTIONS made possible by research in human plasma fractionation at Harvard Medical School, will interest you.

First Texas Chemical Manufacturing Company will display sulfa drugs in booth 1.

Eaton Laboratories, Inc. will exhibit ethical pharmaceutical specialties of interest to the medical profession in booths 2 and 3. Several of these are new and improved advances in therapy.

Lederle Laboratories, Inc., cordially invite you to visit their exhibit in booth 21, featuring their latest and most effective preparations for the treatment of primary and secondary anemias, as well as nutritional deficiencies. Anti Rh Serum, for rapid and simple blood grouping and typing; Ledercillin Lozenges and other penicillin products; and many other specialties will be exhibited. Medical representatives in attendance will be glad to be of service to all visiting physicians.

The Eli Lilly and Company exhibit in booth 26, will feature an interesting demonstration in miniature on penicillin culture. Many Lilly products will be on display, and attending Lilly medical service representatives will be present to assist visiting physicians in every possible way.

The Schenley Laboratories' exhibit in booth 34, will be devoted entirely to penicillin and penicillin products. A series of trans-illuminated Kodachromes of various pyogenic skin infections will show the therapeutic efficacy of Penicillin Ointment Schenley. A well-informed attendant will gladly discuss any phase of penicillin therapy and developments with interested physicians.

The Schering Corporation exhibit in booth 15, will feature the latest developments in endocrine therapy, radiographic aids, and other pharmaceutical advances. Of particular interest will be the presentation of Combisul-TD. Combisul-TD is a sulfonamide combination based upon the now proved therapy which offers the therapeutic benefits of sulfathiazole and sulfadiazine with a material decrease in the danger of renal toxicity and crystalluria.

Schering professional service representatives will be present to answer inquiries and to provide valuable, informative literature.

Sharp & Dohme will have their display at booth 25, featuring Tyrothricin Concentrate for human use, "Lyovac" Normal Human Plasma, "Sulfathalidine," "Sulfasuxidine," and "Caligesic" Ointment, a greaseless anesthetic and analgesic ointment which possesses definite antipruritic action. A cordial welcome awaits all visitors.

White Laboratories, Inc., at booth 30, will present information regarding White's Sulfathiazole Gum—expressly formulated for topical chemotherapy in oropharyngeal infections; White's Otomide—a more effective means of topical chemotherapy in ear infections; and a NEW specialty, White's Mol-Iron Tablets, a new and definite advance in the treatment of iron deficiency anemias. White's ethically promoted vitamin specialties are also featured. You will find a very cordial welcome by White's Medical Service Representatives in charge of the exhibit.

X-Ray and Physiotherapy Equipment

H. G. Fischer & Co., Chicago, manufacturers of x-ray and physiotherapy equipment, will exhibit in booth 19.

General Electric X-Ray Corporation, Dallas, Houston, and San Antonio, in booth 40, suggests factual discussions with members of the Texas sales and service organizations during the state meeting, to aid you in your future apparatus planning. If you are thinking about new and improved x-ray or electromedical apparatus, G. E.'s Layout Engineers can help you with detailed plans and specifications.

Possibly an improvement in radiographic end results is indicated. Or you may wish to know how G. E.'s Periodic Inspection and Adjustment Service can help keep your equipment at its maximum operating efficiency. Why not drop in and avail yourself of G. E.'s wide experience and know-how.

The Gilbert X-Ray Company of Texas, in booths 10 and 11, will greet all of their old friends of the medical profession, as well as the new, and be prepared to reveal a very constructive post-war delivery schedule. They will also have a special display model of the Picker famous Airflow tube, with a cross section showing why there is such a limited number of tube failures with this type.

The Johnson X-Ray and Electro Therapy Company, Dallas, will exhibit the latest in Mattern X-Ray equipment with the new deluxe push button type control, and also new Electro Therapy Apparatus. The company wants physicians to be sure to visit its exhibit, booth 42.

R. P. Kincheloe Company will display Keleket X-Ray apparatus, Cambridge Simpli-Trol Electrocardiographs, Liebel-Flarsheim Short Wave apparatus, and Hanovia Ultra-Violet apparatus in booth 22.

The Southern X-Ray Engineering Company of Houston, Texas, booth 5, will demonstrate x-ray equipment manufactured by the Standard X-Ray Company of Chicago, Illinois; physiotherapy equipment manufactured by the Burdick Corporation, Milton, Wisconsin; and Beck-Lee latest portable electrocardiograph.

The United Medical Equipment Company, distributors, booth 31, will display and demonstrate a new method of electromedical analysis, the new EPL Cardiotron, direct recording electrocardiograph, which gives instantaneous readings and requires no further processing. The Cardiotron was designed, developed, and is manufactured by the Electro-Physical Laboratories, Inc., a division of the Electronic Corporation of America. All physicians are invited to inspect and see in actual operation this latest remarkable development in electrocardiography.

HOUSE OF DELEGATES

First Meeting, Monday, May 6, 10:00 a. m.
Basement Room, Basement, Hotel Galvez

1. Call to order.
2. Roll call and announcement of result.
3. Reading of minutes of previous meeting.
4. Appointment of Reference Committees.
5. Report of Secretary.
6. Report of Treasurer.
7. Report of Board of Trustees.
8. Report of Board of Councilors.
9. Report of Council on Medical Defense.
10. Report of Executive Council.
11. Report of Council on Scientific Work.
12. Report of Council on Medical Economics.
13. Report of Standing Committees:
    - Committee on Legislation.
    - Committee on Public Relations.
    - Committee on Collection and Preservation of Records.
    - Committee on Health Problems in Education.
    - Committee on Cancer.
    - Committee on Transportation.
    - Committee on Arrangements for the Annual Session.
    - Committee on Memorial Exercises.
14. Report of Special Committees:
    - Committee on Scientific Exhibits.
    - Committee on Medical Education and Hospitals.
    - Committee on Revision of Constitution and By-Laws.
    - Advisory Committee to the Woman's Auxiliary.
    - Committee on Mental Health.
    - Committee on Fractures.
    - Committee on Procurement and Assignment.
    - Committee on Maternal and Child Health.
    - Advisory Board to the Texas Society of Medical Technologists.
    - Committee on Tuberculosis.
    - Committee on Venereal Diseases.
    - Committee on Postgraduate Medical Education.
    - Committee on Industrial Health.
    - Committee on Malaria.
    - Committee on Pneumonia Control.
    - Committee on Library Endowment.
    - Committee on Medical Licensure.
    - Liaison Committee, Lone Star State Medical, Dental and Pharmaceutical Association.
    - Advisory Council of Past Presidents.
15. Reports of Special Delegates.
16. Presentation of Fraternal Delegates.
17. Report of Special Committees of the House.
18. Reading of Communications.
19. Reading of Memorials and Resolutions.
20. Unfinished Business.
21. New Business.
22. Reports of Reference Committees:
    (1) Reference Committee on Credentials.
    (2) Reference Committee on Reports of Officers and Committees.
    (3) Reference Committee on Resolutions and Memorials.
    (4) Reference Committee on Finance.
    (5) Reference Committee on Amendments to Constitution and By-Laws.
    (6) Reference Committee on Scientific Work.
    (7) Board of Councilors.
    (8) Board of Trustees.
23. Election of Officers (morning of last day):
    - President-elect.
    - Three Vice-Presidents.
    - One Trustee (Expiration term T. C. Terrell).
    - Five Councilors (Expiration terms Joel Wright, 1st Dist; R. E. Windham, 4th Dist.; A. L. Hathcock, 11th Dist.; O. B. Kiel, 13th Dist.; C. C. Nash, 14th Dist.).
    - Two Delegates to A. M. A. (Expiration terms Holman Taylor and F. J. L. Blasingame).
    - Two Alternate Delegates to A. M. A. (Expiration terms R. B. Anderson, L. H. Reeves).
    - Member, Council on Medical Defense (Expiration term W. A. King).
    - Member, Council on Scientific Work (Expiration term David A. Todd—Nomination by President-elect).
    - Member, Council on Medical Economics (Expiration term W. A. Lee—Nomination by President-elect).
    - Member, Committee on Legislation (Expiration term L. H. Reeves—Nomination by President-elect).
    - Member, Committee on Collection and Preservation of Records (Expiration term E. W. Bertner—Nomination by Retiring President, upon advice of Ex-Presidents Association).
    - Member, Committee on Health Problems in Education (Expiration term D. J. Jinkins—Nomination by President-elect).
    - Member, Committee on Cancer (Expiration term Dudley Jackson—Nomination by President-elect).
    - Member, Committee on Postgraduate Medical Education (Expiration term Felix P. Miller—Nomination by President-elect).
24. Selection of Time and Place of Next Annual Session.

RELATED ORGANIZATIONS

TEXAS RAILWAY AND TRAUMATIC SURGICAL ASSOCIATION

Monday, May 6, 9:00 a. m.
Terrace Dining Room, Lobby Floor, Hotel Galvez

President—W. B. Reeves, Greenville.
First Vice-President—T. M. Harrell, Corpus Christi (deceased).
Second Vice-President—F. L. Snyder, Fort Worth.
Secretary-Treasurer—Ross Trigg, Fort Worth.

1. *President's Address.*
   W. B. Reeves, Greenville.
2. *Surgery in an Overseas General Hospital.*
   Malcolm L. Johnson, Paris.
3. *Widening of Tibial-Fibular Mortise.*
   P. M. Keating, San Antonio.
4. *Treatment of Burns.*
   W. P. Philips, Greenville.
5. *Surgical Treatment of Complications of Old Ankle Fractures.*
   Harry B. Macey, Temple.
6. *Traumatic Eye Injuries.*
   Ray K. Daily, Houston.
7. *Treatment of Contaminated Wound of Extremities in War and Peace.*
   Denman C. Hutcherson, Houston.
8. *Surgical Treatment of Pulmonary Tuberculosis.*
   O. T. Clagett, Mayo Clinic, Rochester, Minnesota.

9. *Nonunion of Fractures Treated with Massive Bone Grafts.*
E. S. WILLIFORD, *Houston.*
10. *Nonunion of Fractures.*
MAJOR M. A. BLUMER, San Antonio.
11. Barbecue for members and guests.

TEXAS STATE HEART ASSOCIATION

Monday, May 6, 9:00 a. m.

Ballroom, Lobby Floor, Hotel Galvez

President—V. E. SCHULZE, San Angelo.
Vice-President—F. E. HUDSON, Stamford.
Secretary-Treasurer—W. B. WHITING, Wichita Falls.

1. *Lumbo-Dorsal Sympathectomy for Hypertension.*
PAUL V. LEDBETTER, Houston.
2. *The Principles Underlying Electrocardiography.*
ARTHUR RUSKIN, Galveston.
3. *Pregnancy in a Case of Congenital Heart Block.*
ROBERT M. BARTON, Dallas.
4. *Some Unusual Electrocardiograms.*
GEORGE M. DECHERD, Galveston.
5. *Report of Rheumatic Fever Committee.*
VICTOR E. SCHULZE, San Angelo.
6. *State Rheumatic Fever Program in Relation to Medical Teaching.*
A. E. HANSEN, Galveston.
7. Business Meeting.
8. *Ascorbic Acid As a Detoxication of the Toxic Manifestations of Mercural Diuretics: Experimental Study.*
D. W. CHAPMAN and C. W. SHAFFER, *Houston.*
9. *Electrocardiographic Patterns in Certain Disorders of the Heart.*
M. B. WHITTEN, Dallas.
10. *Recognition of Congenital Malformations of the Heart for Which There Are Surgical Indications.*
GLADYS J. FASHENA, Dallas.
11. *Further Studies on the Pathogenesis of Essential Hypertension.*
RAYMOND GREGORY, Galveston.
12. *Angina Pectoris* (motion picture).
HARVARD FILM SERVICE.

TEXAS NEUROPSYCHIATRIC ASSOCIATION

Monday, May 6, 9:00 a. m.

Auditorium, State Psychopathic Hospital

President—TITUS H. HARRIS, Galveston.
Vice-President—LEWIS BARBATO, San Antonio.
Secretary-Treasurer—FRED T. ROGERS, Dallas.

8:30 *Registration.*

9:00- 9:45 *Business Session.*

SYMPOSIUM ON PSYCHIATRIC THERAPY

9:45-11:55 *Therapy of the Psychoses.*
Insulin and Combined Therapies (20 minutes).
STEPHEN WEISZ, Galveston.
Electro-Shock Therapy (15 minutes).
A. HAUSER, Houston.
Lobotomy (30 minutes).
Neurosurgical Aspects.
S. R. SNODGRASS, Galveston.
Psychiatric Aspects.
A. J. SCHWENKENBERG, Dallas.
Discussion.
L. HELFER, San Antonio.
Hypnosis and Other Psychotherapeutic Techniques (30 minutes).
MILTON ERICKSON, Eloise, Mich.
Discussion.
GUY WITT, Dallas.
JAMES GREENWOOD, Houston.
DAVID WADE, Austin.
JACK EWALT, Galveston.
EDGAR EZELL, Galveston.
M. L. TOWLER, Galveston.
ALFRED HILL, San Antonio.

12:00 *Round-Table Luncheon.*
Treatment of Epilepsy.
JOHN OTTO, Galveston.

1:30- 2:00 *The Vocational Rehabilitation Program As Applied to Mental Defective and Arrested Psychotic Patients.*
MR. J. J. BROWN, Director, State Board for Vocational Rehabilitation.

2:00- 2:15 *Newer Concepts of Child Guidance.*
JOHN WATERMAN, Houston.

2:15- 2:35 *Management of Emotional Disorders in Adults.*
MELBOURNE COOPER, San Antonio.

2:35- 4:15 *Therapy of the Psychoneuroses with Special Reference to the Use of Hypnosis.*
MILTON ERICKSON, Eloise, Mich.
Narcotherapy.
JAMES BENTON, Galveston.

4:15- 5:00 *Discussion.*
MILTON FINNEY, Houston.
PAUL WHITE, Austin.
J. P. MALLOY, Houston.
H. F. FORD, Galveston.
EUGENE ATEN, Dallas.
P. TALKINGTON, San Antonio.

TEXAS SOCIETY OF GASTRO-ENTEROLOGISTS AND PROCTOLOGISTS

Monday, May 6, 2:00 p. m.

Anchor Room, Lobby Floor, Hotel Galvez

President—JAMES J. GORMAN, El Paso.
Vice-President—CAPTAIN TOM E. SMITH, San Antonio.
Vice-President—G. E. BRERETON, Dallas.
Secretary-Treasurer—GEORGE M. UNDERWOOD, Dallas.

1. *The Psychosomatic Aspects of Gastro-Intestinal Dysfunction.*
TITUS HARRIS, Galveston.
2. *Infectious Hepatitis.*
C. T. STONE, Galveston.
3. *Perianal and Perirectal Infections.*
JOHN MCGIVNEY, Galveston.
4. *The Gastroscopic Findings in Duodenal Ulcer.*
EDWARD LEFEBER, Galveston.
5. *Intestinal Antisepsis.*
EDGAR POTH, Galveston.

TEXAS ASSOCIATION OF MEDICAL ANESTHETISTS

Monday, May 6, 1:00 p. m.

Directors' Room, Lobby Floor, Hotel Galvez

President—E. D. EMBREE, Houston.
Vice-President—WILBER F. ROBERTSON, San Antonio.
Secretary-Treasurer—R. A. MILLER, San Antonio.

1. *Some Physiological Disturbances Caused by Spinal Anesthesia.*
   JOHN ADRIANI, New Orleans, Louisiana.
2. *Baylor University College of Medicine Department of Anesthesiology, Its Establishment and Its Aims.*
   L. F. SCHUHMACHER, JR., Houston.
3. *Curare and Anesthetic Complications.*
   H. C. SLOCUM, Galveston.
4. *The Evaluation and Treatment of Shock.*
   RUSSELL BONHAM, Houston.

TEXAS CHAPTER, AMERICAN COLLEGE OF CHEST PHYSICIANS

Monday, May 6, 10:00 a. m.

Private Dining Rooms 1, 2, and 3, Lobby Floor, Hotel Galvez

President—SAM E. THOMPSON, Kerrville.
First Vice-President—ROBERT G. MCCORKLE, San Antonio.
Second Vice-President—H. FRANK CARMAN, Dallas.
Secretary-Treasurer—ELLIOTT MENDENHALL, Dallas.

1. *Artificial Pneumothorax.*
   DAVID MCCULLOUGH, Kerrville.
   Discussion to be opened by JOHN WIGGINS, Fort Worth.
2. *The Management of the Bronchiectatic Patient.*
   ELLIOTT MENDENHALL, Dallas.
   Discussion to be opened by HENRY R. HOSKINS, San Antonio.
3. *Endothelioma of the Pleura.*
   CAPTAIN HERMAN WEISSMANN, Legion.
   Discussion to be opened by W. W. COULTER, JR., Sanatorium.
4. *The Potential Pathologic Significance of Dusts Found in Texas Industry.*
   CARL U. DERNEHL and CARL O. NAU, Galveston.
   Discussion to be opened by R. G. MCCORKLE, San Antonio.

Recess. (Nominating committee will convene).

2:00 p. m.

5. *An Improved Method of Handling the Second Stage Thoracoplasty.*
   J. W. NIXON, San Antonio.
   Discussion to be opened by HENRY R. HOSKINS, San Antonio.
6. *Treatment of Tuberculous Empyema.*
   T. R. JONES and J. A. LOCKHART, Houston.
   Discussion to be opened by H. FRANK CARMAN, Dallas.
7. *Tuberculosis as Viewed by the General Practitioner.*
   R. W. TAYLOR, Lufkin.
   Discussion to be opened by R. M. MORRISON, Austin.
8. *A Plea for Increased Caution in the Use of Surgical Collapse Therapy for Pulmonary Tuberculosis.*
   W. W. COULTER, JR., Sanatorium.
   Discussion to be opened by J. B. MCKNIGHT, Sanatorium.

6:30 p. m.

9. *Banquet.*
   Our College and College Chapter.
   CHARLES M. HENDRICKS, El Paso, President-Elect, American College of Chest Physicians.
   Business Session and Election of Officers.

CONFERENCE OF CITY AND COUNTY HEALTH OFFICERS

Monday, May 6, 8:00 a. m.

Jolly Rogers Rooms A and B, Mezzanine Floor, Buccaneer Hotel

1. *Address.*
   GEORGE W. COX, State Health Officer, Austin.
2. *Health Units for the State and for the Nation.*
   REGINALD M. ATWATER, New York, N. Y.
3. *Small Town Health Officers' Problems.*
   J. R. DESTEIGUER, San Marcos.
4. *Problems in Tuberculosis Control in Texas.*
   HOWARD SMITH, Austin.
5. *Venereal Disease Control.*
   ROBERT T. POTTER, San Antonio.
6. *Report on an Outbreak of Influenza B.*
   J. V. IRONS, Sc. D., Austin.
7. *Hospital Survey in Texas.*
   MR. N. B. ROBERTS, Austin.
8. *Crippled Children's Program in Relation to Generalized Program.*
   CARL MOORE, Austin.
9. *Necessary Safety Measures in Use of Compound 1080 (Sodium Fluoracetate) As a Rodenticide.*
   ROBERT W. HARDING, B. S., San Antonio.
10. *Medical and Public Health Cooperation with Latin-America.*
    HAROLD WOOD, Houston.
11. *Moving Picture: Hashslinging to Foodhandling.*
    MR. L. E. BRACY, Austin.

Announcements and Program

of the

TWENTY-EIGHTH ANNUAL SESSION

of the

WOMAN'S AUXILIARY TO THE STATE MEDICAL ASSOCIATION OF TEXAS

May 6, 7, 8, and 9, 1946

GALVESTON, TEXAS

OFFICERS

Honorary Life Presidents—Mrs. A. C. Scott, Temple; Mrs. Frank Haggard, San Antonio; Mrs. M. L. Graves, Houston; Mrs. W. A. Wood, Waco.

President—Mrs. Charles B. Alexander, San Antonio.

President-Elect—Mrs. George Turner, El Paso.

First Vice-President—Mrs. S. M. Hill, Dallas.

Second Vice-President—Mrs. William Janssen, Corpus Christi.

Third Vice-President—Mrs. Troy A. Shafer, Harlingen.

Fourth Vice-President—Mrs. Mark H. Latimer, Houston.

Corresponding Secretary—Mrs. Wilber F. Robertson, San Antonio.

Recording Secretary—Mrs. Paul H. Power, Waco.

Publicity Secretary—Mrs. E. L. Howard, Fort Worth.

Treasurer—Mrs. F. R. Rugeley, Wharton.

Parliamentarian—Mrs. W. R. Klingensmith, Amarillo.

Standing Committees

Legislation—Mrs. A. B. Pumphrey, Fort Worth.

Public Relations—Mrs. W. Frank Armstrong, Fort Worth.

Library—Mrs. Frank Haggard, San Antonio, Chairman; Mrs. Sam Thompson, Kerrville; Mrs. R. T. Wilson, Austin; Mrs. W. F. Armstrong, Fort Worth.

Historian—Mrs. H. Leslie Moore, Dallas.

Student Loan Fund—Mrs. M. L. Graves, Houston, Chairman; Mrs. Willard Cooke, Galveston; Mrs. John T. Moore, Houston.

George Plunkett Red Scholarship Fund—Mrs. W. E. Ramsey, Houston; Mrs. Jack Watts, San Antonio.

Memorial Fund—Mrs. O. M. Marchman, Dallas, Chairman; Mrs. J. B. Foster, Houston; Mrs. S. F. Harrington, Dallas.

Resolutions—Mrs. C. C. Jones, Comfort, Chairman; Mrs. W. S. Red, Jr., Houston.

Revisions—Mrs. R. B. Homan, El Paso, Chairman; Mrs. J. Frank Clark, Georgetown; Mrs. Ramsay Moore, Dallas.

Reference—Mrs. S. H. Watson, Waxahachie, Chairman; Mrs. E. W. Coyle, San Antonio.

Archives—Mrs. W. A. Wood, Waco, Chairman; Mrs. S. F. Gilbreath, San Antonio.

Texas Research to Southern Medical Association—Mrs. E. H. Marek, Yoakum.

Bulletin—Mrs. Cecil O. Patterson, Dallas.

Memorial Service—Mrs. P. R. Denman, Houston, Chairman; Mrs. Marvin Duckworth, Cuero; Mrs. A. J. Streit, Amarillo.

Advisory—Mrs. Scott Applewhite, San Antonio, Chairman; Mrs. Sam Thompson, Kerrville; Mrs. A. B. Pumphrey, Fort Worth; Mrs. P. R. Denman, Houston; Mrs. S. F. Harrington, Dallas; Mrs. W. M. Hibbitts, Texarkana; Mrs. S. H. Watson, Waxahachie.

Special Advisory—Mrs. E. V. De Pew, San Antonio, Chairman; Mrs. F. F. Kirby, Waco; Mrs. W. R. Thompson, Fort Worth; Mrs. R. B. Homan, El Paso; Mrs. John T. Moore, Houston; Mrs. Frank Haggard, San Antonio; Mrs. G. V. Brindley, Temple; Mrs. H. R. Dudgeon, Waco; Mrs. E. H. Cary, Dallas; Mrs. O. M. Marchman, Dallas; Mrs. H. C. Haden, Houston; Mrs. Joe Gilbert, Austin; Mrs. H. B. Trigg, Fort Worth; Mrs. S. M. Collom, Texarkana; Mrs. W. A. Wood, Waco; Mrs. M. L. Graves, Houston.

Budget and Finance—Mrs. W. M. Hibbitts, Texarkana, Chairman; Mrs. Walter Minsch, San Antonio; Mrs. E. C. Ferguson, Beaumont.

Nomination—Mrs. Sam Thompson, Kerrville, Chairman; Mrs. Frank Haggard, San Antonio; Mrs. W. F. Armstrong, Fort Worth; Mrs. R. C. Cross, Texarkana; Mrs. John T. Moore, Houston; Mrs. C. M. Cash, San Benito; Mrs. C. O. Patterson, Dallas.

Convention Committees

Executive Board Luncheon—Mrs. A. N. Boyd, Houston; Mrs. Hughes Gilliam, Galveston; Mrs. P. R. Denman, Houston.

Council Women's Luncheon—Mrs. S. M. Hill, Dallas; Mrs. L. L. D. Tuttle, Houston.

Council Women

District One—Mrs. Joel Wright, Alpine.
District Two—Mrs. T. D. Young, Roscoe.
District Three—Mrs. Emerson M. Blake, Lubbock.
District Four—Mrs. Joe McFarland, Brownwood.
District Five—Mrs. R. H. Crockett, San Antonio.
District Six—Mrs. Paul H. Frenzel, Donna.
District Seven—Mrs. T. J. McElhenney, Austin.
District Eight—Mrs. R. M. Milner, Yoakum.
District Nine—Mrs. L. L. D. Tuttle, Houston.
District Ten—Mrs. R. C. Bellamy, Daisetta.
District Eleven—Mrs. L. B. Windham, Tyler.
District Twelve—Mrs. Cleveland H. Brooks, Waco.
District Thirteen—Mrs. E. Roy Townsend, Eastland.
District Fourteen—Mrs. O. W. Robinson, Paris.
District Fifteen—Mrs. R. C. Cross, Texarkana.

Local Convention Chairmen

General Arrangements—Mrs. Paul Brindley.
Registration and Courtesy—Mrs. H. H. Sweets, Jr., and Mrs. J. A. Place.
Hostesses—Mrs. John Otto.
Golf—Mrs. Edward Randall, Jr.
Publicity—Mrs. J. K. Lamar.
Transportation—Mrs. Stephen Weisz.
Executive Board Luncheon—Mrs. Hughes Gilliam.
Past Presidents' Dinner—Mrs. M. L. Graves, Honorary Member of Galveston Auxiliary.
Council Women's Luncheon—Mrs. Frederick Fowler.
Tea—Mrs. George T. Lee.
No Host Auxiliary Luncheon—Mrs. Robert M. Moore.
Memorial Service—Mrs. John McGivney.
Post Executive Board Coffee—Mrs. J. L. Jinkins.

Monday, May 6

9:00 a. m. to 5:00 p. m. Registration and Open House, Mezzanine Lounge, Buccaneer Hotel; Mrs. J. B. Johnson, Chairman of Registration, and Mrs. John Otto, Chairman of Hostesses.

11:00 a. m. Preconvention Meetings of the Library, Student Loan Fund, George Plunkett Red Fund, Memorial Fund, and Nominating Committees, Mezzanine Floor, Buccaneer Hotel.

1:00 p. m. State Executive Board Luncheon, Solarium, Buccaneer Hotel; President, Mrs. Charles B. Alexander, San Antonio, presiding.

Invocation—Mrs. E. H. Marek, Yoakum.

Address of Welcome—Mrs. Paul Brindley, President, Galveston Auxiliary.

Response—Mrs. M. L. Graves, Houston.

Presentation of Past Presidents—Mrs. S. F. Harrington, Dallas.

Message from the President-Elect—Mrs. George Turner, El Paso.

Address—Dr. Merton M. Minter, San Antonio, Member, Public Relations Committee, State Medical Association.

Recommendations from Chairmen of Standing Committees—General Chairman, Mrs. A. N. Boyd, Houston.

6:00 p. m. Past State Presidents' Dinner, Solarium, Buccaneer Hotel. Hostess—Mrs. R. B. Homan, El Paso; Co-Hostesses—Mrs. M. L. Graves, Houston; Mrs. Henry Haden, Houston; Mrs. John T. Moore, Houston.

Tuesday, May 7

9:00 a. m. Opening Exercises of State Medical Association, Ballroom, Lobby Floor, Hotel Galvez.

11:00 a. m. First Business Session of the Woman's Auxiliary to the State Medical Association, Ballroom, Buccaneer Hotel; President, Mrs. Charles B. Alexander, San Antonio, presiding.

Invocation—Mrs. H. R. Dudgeon, Waco.

Address of Welcome—Mrs. John Otto, President-Elect of Galveston Auxiliary.

Response—Mrs. J. H. McCracken, Jr., Dallas.

Reports of State Officers and Committee Chairmen.

12:30 p. m. Council Woman's Luncheon, Solarium, Buccaneer Hotel.

Round-Table Discussion led by Mrs. S. M. Hill, Dallas, General Chairman—Mrs. L. L. D. Tuttle, Houston.

4:00 p. m. Tea honoring the State President, Mrs. Charles B. Alexander; President-Elect, Mrs. George Turner; all members of the Auxiliary, and all visiting ladies, at the home of Mrs. George T. Lee, 4600 Caduceus. Compliments of the Galveston Auxiliary.

9:15 p. m. Reception and Ball, honoring Dr. H. F. Connally, Waco, President of the State Medical Association, Ballroom, Lobby Floor, Hotel Galvez.

Wednesday, May 8

9:00 a. m. Second Business Session of Auxiliary, Solarium, Buccaneer Hotel.

Address—Dr. H. F. Connally, President, State Medical Association.

Reports of Council Women and County Presidents.

1:00 p. m. No Host Luncheon for All Members and Visiting Ladies, Dining Room and Deck, Buccaneer Hotel.

Invocation—Mrs. W. Frank Armstrong, Fort Worth.

Address: The History of Psychiatry, and Its Present Place in Medicine—Dr. Titus H. Harris, University of Texas School of Medicine, Galveston.

Auxiliary High Lights and Awards—Mrs. H. Leslie Moore, Dallas, Historian.

Report of Resolutions Committee.

Election and Installation of Officers—Mrs. G. V. Brindley, Temple, Chairman of Installation.

Acceptance of Gavel—Mrs. George Turner, El Paso.

3:00 p. m. to 4:00 p. m. School of Instruction for All County Officers and Chairmen Hotel Suites of the State Officers and Chairmen.

Class for County Presidents, Solarium, Buccaneer Hotel—Conducted by Mrs. Frank Haggard, San Antonio.

5:15 p. m. to 6:15 p. m. Memorial Services of the State Medical Association and Woman's Auxiliary, Ballroom, Lobby Floor, Hotel Galvez. Dr. W. L. Crosthwait, Waco, State Medical Association Chairman; Mrs. P. R. Denman, Houston, Auxiliary Chairman.

Thursday, May 9

9:30 a. m. Post Executive Board Coffee, honoring Mrs. George Turner, State President 1946-1947, and Mrs. R. B. Homan, El Paso, home of Mrs. J. L. Jinkins, 3121 Avenue P. Hostesses—Mrs. E. R. Marek, Yoakum; Mrs. J. L. Jinkins.

Data Requested by Council on Scientific Work for Preparation of the 1947 Annual Session Program

Each registrant is requested to furnish the data asked for here. The information may either be turned in to the Section Officers or to the Registration desk at the annual session, or may be mailed to the State Secretary, 1404 West El Paso Street, Fort Worth 3.

A. Nominate, in order of preference, your choice of out-of-state guest speakers for the 1947 annual session, indicating the specialty of each and the section before which he should appear.

B. List at least five subjects on which you would like to hear papers read.

C. Write any suggestions or criticisms you care to make concerning the conduct of, or arrangements for, the annual session.

(Signed) .....

(Address) .....

MEDICAL OFFICERS RETURNING TO TEXAS*

(Corrections: Urban J. Dowling, formerly of Sweetwater, has returned to Amarillo; Cecil M. French, formerly Dallas, to San Angelo; James O. Gilliland, formerly Pampa, to Mangum, Okla.; E. R. Hayes, formerly Greenville, to University of Minnesota, Minneapolis; Robert H. Johnson, formerly Hamlin, to Snyder; Walter B. King, Jr., formerly Waco, to University of Texas, Galveston; Robert W. Osborn, formerly McAllen, to New Orleans, La.; W. L. Smith, formerly Sonora, to San Angelo, and Robert S. Sparkman, listed Waco, to Dallas.)

NAME	Serv.†	Location	Release Date
Angelina County			
3. Medford, Ulen G., Jr.	A	Lufkin	
Bastrop County			
2. Hudson, Richard L.	N	Smithville	
Bexar County			
79. Coates, Elmer T.	N	San Antonio	
80. Fisher, Herbert C.	A	San Antonio	
81. McIlhenny, W. I., Jr.	A	San Antonio	
82. Morell, Willard B.	A	San Antonio	
83. Novak, Lumir F.	A	San Antonio	
84. Pfitsch, Alfred, Jr.	A	San Antonio	
85. Phillips, Claude M.	A	San Antonio	
86. Rice, Lee	A	San Antonio	
87. Rothe, Courand N.	A	San Antonio	
88. Saegert, August H.	A	San Antonio	
Brown-Comanche-Mills-San Saba Counties			
11. Hughes, Sidney W.	A	Brownwood	
12. Ory, L. Kenneth	A	Comanche	
Coleman County			
3. Lovelady, Roy R.	A	Santa Anna	
Cooke County			
4. Maxwell, Hal W.	N	Myra	
Dallas County			
117. Armbrust, Charles A., Jr.	A	Dallas	
118. Brau, John G.	A	Dallas	Nov., 1945
119. Bryant, George C., Jr.	A	Dallas	
120. Buzbee, Herman R.	A	Dallas	
121. Girard, P. M.	A	Dallas	Feb., 1946
122. Graham, J. F.	A	Dallas	
123. Hartin, Richard B.	A	Garland	Feb., 1946
124. Keene, A. H.	N	Richardson[1]	
125. Legg, Eugene P.	A	Dallas	
126. McClung, Hugh L.	A	Dallas	
127. Magruder, Charles L.	A	Dallas	
128. Marchman, Oscar, Jr.	A	Dallas	
129. Mock, Ernest L.	A	Dallas	
130. Shannon, Manning B., Jr.	A	Dallas	
Dawson-Lynn-Terry-Gaines-Yoakum Counties			
5. Stevenson, Edward N.	A	Seagraves	
DeWitt County			
3. Klecka, Theodore A.	A	Cuero	
Eastland-Callahan Counties			
2. Chaney, Clyde	N	Ranger	Jan., 1946
Ector-Midland-Martin-Howard-Andrews-Glasscock Counties			
8. Britt, C. S.	N	Midland	
9. Lemee, Raymond A.	A	Odessa	
10. Yarbrough, Cecil G.	A	Midland	
Ellis County			
5. Bodenhamer, J. G.	A	Palmer[2]	Feb., 1946
6. Walker, Allen E.	A	Waxahachie	
El Paso County			
35. Hart, Maynard S.	A	El Paso	
Galveston County			
36. Ainsworth, William H.	A	Galveston	
37. Diamond, Max M.	A	Galveston	
38. Kost, Louis B.	A	Galveston	
39. Tinterow, Maurice M.	A	Galveston	
Grayson County			
10. Cantrell, William H.	A	Van Alstyne	
Gregg County			
13. Cox, Abram M.	N	Longview	
Harris County			
166. Able, Luke W.	N	Houston	
167. Brannon, Jack G.	A	Houston	Apr., 1946
168. Butera, James M.	A	Houston	
169. Crain, Edward L., Jr.	N	Houston	
170. Donovan, T. J.	A	Houston	Mar., 1946
171. Edwards, Robert A.		Houston	
172. Glover, F. Scott, III	A	Houston	Feb., 1946
173. Hamrick, Wendell H.	N	Houston	
174. Hander, William W.	A	Houston	
175. Hoeflich, Werner F. A.	A	Houston	
176. Hotchkiss, D. H.	A	Houston	Jan., 1946
177. Lawrence, Buell A.	A	Houston	
178. Littell, Milton	A	Houston	
179. Moers, Arthur E.	A	Houston	
180. Oliver, F. Scott	A	Houston	Apr., 1946
181. Parr, Luther H.	N	Houston	Feb., 1946
182. Patteson, James L.	N	Houston	
183. Rumph, Quah	N	Houston	
184. Sanderson, T. A.	A	Houston	Mar., 1946
Harrison County			
4. Granbery, R. G.	A	Marshall	Feb., 1946
5. Heidelberg, C. H.	A	Marshall	Feb., 1946
6. Rice, Lee Roy	A	Marshall[1]	
Hays-Blanco Counties			
3. Bergfeld, Arthur W. C.	A	New Braunfels	
Henderson County			
2. Rosenbloom, Joseph	A	Trinidad[2]	
Hidalgo-Starr Counties			
8. Lubben, John F., Jr.	A	McAllen	Feb., 1946
Jasper-Newton Counties			
5. Monroe, Myrick L.	A	Jasper	
6. Wilson, I. G.	A	Pineland[3]	
Jefferson County			
37. Kaplan, Hyman J.		Beaumont[4]	
38. McDanald, Eugene C., Jr.	A	Beaumont	
39. Pruitt, L. T.		Beaumont	Feb., 1946
40. Stevens, Robert B.		Beaumont	Jan., 1946
41. Woodward, John F., Jr.	N	Beaumont[5]	Mar., 1946
Karnes-Wilson Counties			
4. Jones, Ernest W.	A	Kenedy	
5. Shannon, Shelby E.	A	Karnes City	
Kerr-Kendall-Gillespie-Bandera Counties			
6. Bruce, Paul C.	A	Legion	
Kimble-Mason-Menard-McCullough Counties			
3. McCollum, Floyd L.	A	Mason	
Kleberg-Kenedy Counties			
2. Hill, Robert M.	A	Kingsville	
Lavaca County			
4. Wolters, Carlton E.	N	Shiner	
Lee County			
1. Burns, Robert B.	A	Giddings	
Limestone County			
5. Montgomery, William D.	A	Thornton	
Lubbock-Crosby Counties			
13. Clark, Doyce M.	A	Lubbock	
14. Elkins, Clyde F.	A	Lubbock	
McLennan County			
18. DePasquale, Francis L.	A	Waco	
19. Hawkins, Winfred W.	A	Waco	
20. Holley, Sion W.	A	Waco	
21. McVay, Melvin J.	A	Waco	
22. Powell, Sam M., Jr.	A	Waco	
23. Price, Enoch C.	A	Waco	
Medina-Uvalde-Maverick-Val Verde-Edwards-Real-Kinney-Terrell-Zavala Counties			
3. Hyslop, James R.	A	Del Rio[6]	
Nolan-Fisher-Mitchell Counties			
7. P'Pool, William F.	A	Sweetwater	
Nueces County			
20. Eckhardt, Kleberg	N	Corpus Christi	
21. Ghormley, William C.	A	Corpus Christi	Feb., 1946
22. Heymann, Hans E.	A	Corpus Christi	
23. Matros, Nathaniel H.	N	Corpus Christi	
24. Posner, Sidney	A	Robstown	Feb., 1946

*EDITOR'S NOTE: This list is the sixth of a series in which it is hoped to name all those physicians who have been in the Armed Forces during the war just passed and have now returned to Texas to resume civilian practice. The information in this list has been assembled from a variety of sources. While an attempt has been made to secure as complete and as accurate data as possible, we are aware that omissions and errors have been made. Not only for publication in the JOURNAL but also for the permanent records in the central office of the State Medical Association, we invite and urge correction of and addition to the material here submitted. Note that physicians from each county area are numbered consecutively following those listed in the March JOURNAL; the last number in each section therefore indicates the total physicians returned to that county area. The complete total for Texas named to date (March 25), including the accompanying list, is 1,085.

†A=Army; N=Navy; U=U. S. Public Health Service.

[1]Formerly of Dallas.
[2]Formerly of Odessa.
[3]Formerly of Gainesville.
[4]Formerly of Broaddus.
[5]Formerly of Beaumont.
[6]Formerly of Orange.
[7]Formerly of New York, N. Y.
[8]Formerly of El Paso.

NAME	Serv.†	Location	Release Date
Potter County			
14. Miller, Frank P.	A	Amarillo	
15. Murphy, Weldon O.		Amarillo	
16. Payne, Ralph B.	A	Amarillo	
17. Russell, Woolworth A.	A	Amarillo	
18. White, Louis L.	A	Amarillo	
Randall-Deaf Smith-Parmer-Castro-Oldham Counties			
2. Hampton, Dan E.	A	Friona	
3. Neblett, Robert A.	A	Canyon	
Rusk County			
8. Deason, Loyd S.	N	Henderson	
San Patricio-Aransas-Refugio Counties			
5. Guynes, William A.	N	Mathis	
Smith County			
7. Roosth, Harold	A	Tyler	
Tarrant County			
54. Chorn, E. H.		Fort Worth	
55. Eschenbrenner, John W. Jr.	A	Fort Worth	
56. McGee, Aubrey S.	A	Handley	
57. Mitchell, Gatlin		Fort Worth	
58. Rehfeldt, Frederick A.	A	Fort Worth	
Travis County			
23. Dashiell, Albert M.	A	Austin	
24. McKellar, Thomas F.	A	Pflugerville	
Walker-Madison-Trinity Counties			
7. Cochran, Ernest W.	N	Trinity	
Webb-Zapata-Jim Hogg Counties			
7. Miller, Walter S., Jr.	A	Laredo	
Wichita County			
11. Robertson, D. Lyle	A	Wichita Falls	Feb., 1946
Wilbarger County			
1. Muirhead, James R.	A	Vernon	Feb., 1946
Young-Jack-Archer Counties			
5. Edwards, Buell F.	A	Graham	

MISCELLANEOUS

COMING MEETINGS AND CLINICS

State Medical Association of Texas, Galveston, May 6-9, 1946. Dr. H. F. Connally, Waco, President; Dr. Holman Taylor, 1404 W. El Paso St., Fort Worth, Secretary.

American Medical Association, San Francisco, July 1-5, 1946. Dr. Roger I. Lee, Boston, President; Dr. Olin West, 535 North Dearborn Street, Chicago, Secretary.

Southern Medical Association. Dr. M. Y. Dabney, Birmingham, Ala., President; C. P. Loranz, Empire Building, Birmingham, Ala., Secretary-Manager.

Southwest Allergy Forum, Houston, April 8-9, 1946. Dr. George W. Owen, Jackson, Miss., Temporary President; Dr. A. H. Braden, 1910 Crawford St., Houston, Secretary.

Texas Association of Medical Anesthetists, Galveston, May 6, 1946. Dr. E. D. Embree, Houston, President; Dr. R. A. Miller, 1415 Nix Professional Building, San Antonio, Secretary.

Texas Association of Obstetricians and Gynecologists, Galveston. Dr. Allen McMurrey, Houston, President; Dr. Julius McIver, 714 Medical Arts Building, Dallas, Secretary.

Texas Chapter American College of Chest Physicians, Galveston, May 6, 1946. Dr. S. E. Thompson, Kerrville, President; Dr. Elliott Mendenhall, Dallas, Secretary.

Texas Cluh of Internists. Dr. Robert M. Barton, Dallas, President; Dr. Julian C. Barton, 414 Navarro St., San Antonio, Secretary.

Texas Hospital Association. Tol Terrell, Harris Memorial Methodist Hospital, Fort Worth, President; Miss Madelyne Sturdavant, 5709 Velasco, Dallas, Secretary.

Texas Neuropsychiatric Association, Galveston, May 6, 1946. Dr. Titus Harris, Galveston, President; Dr. Fred Rogers, Dallas, Secretary.

Texas Ophthalmological and Otolaryngological Society, Dallas, December, 1946. Dr. C. B. Williams, Mineral Wells, President; Dr. E. D. Dumas, San Antonio, Secretary.

Texas Orthopedic Society. Dr. E. A. Cayo, San Antonio, President; Dr. Edward Smith, Houston, Secretary.

Texas Pediatric Society, Fort Worth, October, 1946. Dr. Max Woodward, Sherman, President; Dr. John E. Ashby, Dallas, Secretary.

Texas Public Health Association, Austin, May 27-28, 1946. Dr. Lewis Dodson, University of Michigan, Ann Arbor, Mich., President; Mr. E. W. Sudderth, Sanitary Engineer, Court House, Dallas, Secretary.

Texas Radiological Society, January, 1947. Dr. Herman Klapproth, Sherman, President; Dr. R. P. O'Bannon, 650 Fifth Ave., Fort Worth, Secretary.

Texas Railway and Traumatic Surgical Association, Galveston, May 6, 1946. Dr. W. B. Reeves, Greenville, President; Dr. Ross Trigg, First National Bank Building, Fort Worth, Secretary.

Texas Society for Mental Hygiene. Dr. Jack R. Ewalt, University of Texas Medical Branch, Galveston, President; Mrs. Elizabeth F. Gardner, 1617 Watchhill Road, Austin 21, Executive Secretary.

Texas Society of Gastro-Enterologists and Proctologists, Galveston, May 6, 1946. Dr. James J. Gorman, El Paso, President; Dr. George M. Underwood, 4105 Live Oak Street, Dallas, Secretary.

Texas Society of Pathologists, Galveston, May 8, 1946. Dr. May Owen, Fort Worth, President; Dr. C. T. Ashworth, Southwestern Medical College, Dallas, Secretary.

Texas State Heart Association, Galveston, May 6, 1946. Dr. Victor E. Schulze, San Angelo, President; Dr. Walter B. Whiting, Wichita Falls, Secretary.

Texas Surgical Society, Temple, April 1-2, 1946. Dr. G. V. Brindley, Temple, President; Dr. Walter Stuck, 1426 Nix Professional Building, San Antonio, Secretary.

Texas Tuberculosis Association, September, 1946. Dr. J. B. White, Amarillo, President; Miss Pansy Nichols, Austin, Executive Secretary.

Third Panhandle, District Medical Society, Amarillo, April 9-10, 1946. Dr. D. D. Cross, Lubbock, President; Dr. George Powers, Amarillo, Acting Secretary.

Fourth District Medical Society, Brady, November, 1946. Dr. H. L. Locker, Brownwood, President; Dr. Glenn H. Ricks, Brady, Secretary.

Fifth and Sixth, Southwest District Society. Dr. Phil A. Bleakney, Harlingen, President; Dr. C. W. Tennison, San Antonio, Secretary.

Seventh, Austin, District Society. Dr. Robert B. Morrison, Austin, President; Dr. M. I. Brown, Austin, Secretary.

Eighth, Ninth and Tenth Districts Medical Society, Brenham, April 17, 1946. Dr. J. T. Tadlock, Dayton, President; Dr. George W. Waldron, Medical Arts Building, Houston, Secretary.

Eleventh District Society, Palestine. Dr. L. L. Travis, Jacksonville, President; Dr. C. B. Young, Tyler, Secretary.

Twelfth, Central Texas, District Society, Corsicana, July, 1946. Dr. Thomas G. Glass, Marlin, President; Dr. H. F. Connally, Jr., Waco, Secretary.

Thirteenth, Northwest District Society. Dr. A. L. Roberts, Fort Worth President; Dr. Joe R. Wise, 1212 W. Lancaster, Fort Worth, Secretary.

Fourteenth District Society, Gainesville, June 11, 1946. Dr. C. B. Thayer, Gainesville, President; Dr. V. L. Tuck, Sherman, Secretary.

Fifteenth, Northeast Texas, District Society, October, 1946. Dr. Frank Littlejohn, Marshall, President; Dr. Henry H. Niehuss, Greggton, Secretary.

CLINICS

Post Graduate Medical Assembly of South Texas, Houston, December 3-5, 1946. Secretary, 229 Medical Arts Building, Houston.

HOSPITALS NEEDING INTERNS AND RESIDENTS

Methodist Hospital, Dallas. Capacity 206 beds. C. B. Fielder, Superintendent; (4 interns now).

Brackenridge Hospital, Austin. Capacity 225 beds. J. M. Coleman, M. D., Medical Director; (2 interns, July 1).

All Saints Episcopal Hospital, Fort Worth. Capacity 110 beds. Eva M. Wallace, R. N., Superintendent. Approved general residency; (2 residents on or before April 1).

El Paso City County Hospital, El Paso. Capacity 192 beds. George W. Cook, Col., U. S. A., Ret., Superintendent; (3 interns for one year term, graduates of class A medical schools only, July 1).

TEXAS SOCIETY FOR MENTAL HYGIENE

The thirteenth annual conference of the Texas Society for Mental Hygiene was held at the Buccaneer Hotel in Galveston March 7 and 8, with a "double header" program featuring simultaneous conferences on psychiatry in industry and on youth and mental health.

Among the special guests invited to lecture at the conference were Mrs. Evelyn M. Duvall, secretary of the National Conference on Family Relations and author of articles and books on marriage and family living; Dr. Lydia G. Giberson, head of the neuropsy-

chiatric staff of the Metropolitan Life Insurance Company, professor in the New York Medical School, and author in the psychiatric field; Dr. Victor H. Vogel, psychiatrist with the U. S. Public Health Service; Mrs. Erika Chance, professionally trained social worker of Hove, Sussex, England, who worked with young people in England during the war years; and Col. Franklin G. Ebaugh, head of the Department of Psychiatry, University of Colorado Medical School, and formerly consuling psychiatrist of the Eighth Service Command.

Dr. Paul L. Boynton, president of the Texas Society for Mental Hygiene and of Stephen F. Austin State Teachers College; Miss Lurline Brady and J. Harry Craig, members of the staff of the counseling program in the Austin Public Schools; Dr. Jack Ewalt, professor of psychiatry at the University of Texas School of Medicine and director of the Galveston State Psychopathic Hospital, and a score of other Texans participated in the program.

Formal reopening of the Galveston State Psychopathic Hospital, a board of directors luncheon, an informal banquet and reception, and a business session were also included in the two-day program.

Officers elected include Dr. Jack R. Ewalt, Galveston, president; Dr. Robert L. Sutherland, Austin, vice-president; Dr. Ozro T. Woods, Dallas, vice-president; Miss Margaret Peck, Austin, secretary; and Miss Jennie S. Wilmot, Austin, treasurer.

Dr. Ewalt was chairman of the general conference committee, aided by numerous assistants. Coöperating in providing service or financial grants were the University of Texas Medical Branch, Galveston Community Council, Galveston Chamber of Commerce, and the Hogg Foundation at the University of Texas Main Branch.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

The general oral and pathology examinations (Part II) for candidates seeking approval by the American Board of Obstetrics and Gynecology will be held in Chicago, May 6-11, 1946, the Board announces. The Palmer House will be headquarters for the Board.

Candidates for re-examination in Part II must make written application to the Secretary's office, 1015 Highland Building, Pittsburgh 6, Pa., not later than April 15. Candidates in military service are requested to inform the Secretary of any change of address. Deferment without time penalty will be granted if a candidate in service finds it impossible to proceed with the examinations.

Applications are now being received for the 1947 examinations.

AMERICAN COLLEGE OF CHEST PHYSICIANS EXAMINATION AND MEETING

The next oral and written examinations for Fellowship in the American College of Chest Physicians will be held at San Francisco on June 29. Applicants who plan on taking the examination should communicate with the Executive Secretary, American College of Chest Physicians, 500 North Dearborn St., Chicago 10, Ill.

The twelfth annual meeting of the college is scheduled to be held at the Sir Francis Drake Hotel, San Francisco, June 29-30, July 1-2.

INTER-AMERICAN CONGRESS OF RADIOLOGY

The second Inter-American Congress of Radiology, originally scheduled for January, 1946, and later postponed because of transportation difficulties, will be held November 17-22 in Havana at the Hotel Nacional, announces the American College of Radiology.

The program committee has reserved sixteen places on the program for essayists from North America. Radiologists desiring to present papers should communicate with Dr. James T. Case, chairman of the general committee for the United States, at 20 North Wacker Drive, Chicago 6, Ill. Delegates from this country are also invited to present scientific exhibits.

Afternoon symposia on cancer of the stomach, bone tumors, bronchogenic carcinoma, and radiological mass surveys will be held in addition to morning sections on diagnosis and therapy. Midday hours will be devoted to social functions.

All radiologists expecting to attend the Congress, registration fee for which is $10, should notify Dr. Case as soon as possible so that hotel reservations may be made.

TEXAS CLUB OF INTERNISTS

The Texas Club of Internists at its meeting February 22 and 23 in Dallas elected the following officers: Dr. Alvis E. Greer, Houston, president; Dr. W. B. Adamson, Abilene, vice-president; and Dr. Julian C. Barton, San Antonio, re-elected secretary-treasurer.

Dr. Tinsley R. Harrison, dean and professor of medicine, Southwestern Medical College, Dallas, was elected to membership.

The following program was carried out:

February 22

Respiratory Dynamics in Dyspneic Patients—Howard E. Heyer, M. D., Dallas.
Biological Assays of Hormones in Blood and Urine—Carl Bunde, Ph. D., Dallas.
Current Studies on Treatment of Experimental Virus Infections—S. Edward Sulkin, Ph. D., Dallas.
Some Structural Aspects of Aging—Warren Andrew, M. D., Dallas.
Methionine in Prevention of Liver and Kidney Injury Produced by Pyridine Ingestion—James Baxter, M. D., Dallas.
Hepato-Toxins—Morton Mason, Ph. D., Dallas.
Studies on Chemotherapy of Tuberculosis—Andres Goth, M. D., Dallas.
Venous Pressure in the Mechanism of Heart Failure—Harold Grant.
Current Experiences with Low Sodium Diets in Ambulatory Hypertensive Patients—S. A. Shelburne, M. D., Dallas.

February 23

Electrocardiographic Changes in Neuropsychiatric Patients—Henry Winans, M. D., Dallas.
Chronic Nontuberculous Pulmonary Disease—John Chapman, M. D., Dallas.
Rh Factor—J. M. Hill, M. D., Dallas.
A Discussion of Wilson's Concepts of Precordial Leads—Maurice Scurry, M. D., Dallas.
Experiences with Malaria in the South Pacific—Grady Reddick, M. D., Dallas.

ANEMIAS AIDED BY FOLIC ACID

Persons suffering from nutritional, pernicious, or pregnancy anemia, pellagra, or sprue, all of which are classified as "macrocytic" anemias, can be greatly aided by the action of synthetic folic acid, a part of the B complex vitamins, according to Tom D. Spies, M. D., of Birmingham, Ala., and his associates.

Writing in the February 23 issue of *The Journal of the American Medical Association*, Dr. Spies says that the group's "findings are so striking that I have no hesitancy in making the statement that folic acid, a vitamin present in liver, yeast, and other food materials, is a potent antianemic factor in certain types of macrocytic anemia in relapse. Folic acid performs a specific function in the maturation of the various cells of the bone marrow and has other obvious profound effects on our bodies."

Observations were made on 45 patients in Birmingham, Ala., and in Havana, Cuba. Eighteen showed no improvement, for it was found that patients suffering with aplastic anemia, iron deficiency anemia, or leukemia were not aided by this treatment. Twenty-six of the 27 who had one of the five above-mentioned forms of macrocytic anemia showed prompt improvement.

COMMISSION ON HOSPITAL CARE REPORT

Expansion of services of the large general hospital to include tuberculosis and nervous and mental care may well take place in the future, suggested Arthur C. Bachmeyer, M. D., at the Midyear Conference of the American Hospital Association, February 8 and 9 in Chicago. The director of study of the Commission on Hospital Care, an independent public service committee studying hospital facilities in the United States and initiated by the Association, Dr. Bachmeyer spoke before officers of hospital organizations of the United States and Canada.

Discussions of relationships of the general hospital to all types of health care bring the following considerations to the fore, Dr. Bachmeyer told the conferees:

1. The advisability of constructing new tuberculosis facilities adjacent to and operated in conjunction with large general hospitals.
2. The provision of facilities in large general hospitals for diagnosis of nervous and mental patients, and for treatment of those patients not in need of long-term institutional care.
3. The feasibility of expanding the functions of special communicable disease hospitals now operated by cities, towns, and villages to include all types of illness.

The possibility of the maintenance of nursing schools by large institutions only, which would affiliate for rural hospital experience with hospitals in smaller communities; improved hospital care for Negroes; and the computation of the need for hospital beds in local or statewide areas based upon the ratio between the death rate and the days of hospital care were other proposals related to the group by Dr. Bachmeyer.

"Action on state surveys of hospital facilities has now been taken in every state and in the District of Columbia," he said. Thirty-one surveys are now actually in progress.

SUGAR DEFICIENCY IN BLOOD

Fatigue and dizziness from hypoglycemia, which is a deficiency of sugar in the blood, is effectively alleviated by dietary treatment with high proteins and complex carbohydrates.

Writing in the March 2 issue of *The Journal of the American Medical Association,* Major Samuel C. Karlan and Captain Clarence Cohn, of the Medical Corps, Army of the United States, say:

"Of 100 cases of fatigue and weakness studied, 9 were believed to be primarily caused by hypoglycemia. The main complaints in all these cases were fatigue and dizziness. Unlike the fatigue in ordinary neurasthenia, the fatigue suffered by these patients was not continuous but occurred at specified times, such as on arising in the morning or several hours after meals. It almost invariably occurred after having missed a meal. . . .

"The treatment used in these cases was entirely dietary. Diets high in proteins and carbohydrates of the more complex variety (starches rather than sugar) with frequent feedings prevented the symptoms in our cases."

NEW FILMS FOR THE LIBRARY

The Motion Picture Lending Library of the Association has received the following additional films for relending. Appreciation is herewith expressed to Mead Johnson & Company, The Borden Company, Swift & Company, and British Information Services for these valuable contributions to the Film Library. A description of each film follows:

When Bobby Goes to School. 16 mm., sound, showing time, 25 minutes. (Available through the courtesy of Mead Johnson & Company.) This firm was produced by the American Academy of Pediatrics, and is a motion picture for parents. It stresses the privilege and responsibility of today's parents in equipping the young men and women of tomorrow with their rightful heritage—a sound mind in a sound body—in order that they may be able to make their way in the world, with its problems and adjustments. Here are seen coöperation among parent, teacher, and physician in working toward this end. It is suitable for such lay groups as P. T. A., American Legion, Kiwanis, Rotary, and Women's Clubs.

Normal Delivery. 16 mm., silent, showing time, 12 minutes. (Available through the courtesy of Mead Johnson & Company.) This film, illustrating the technique of delivery in vertex presentation, is planned for the instruction of student nurses. It begins with the preparation of the patient, shows the different stages of labor, the handling and care of the newborn infant, and the detailed care of the patient after delivery.

From Moo to You. 16 mm., sound, color, showing time, 9 minutes. (Available through the courtesy of The Borden Company, New York.) This film is a simplified introduction to the study of economics along with production, processing, distribution, and the safeguarding of milk. Its main purpose is to stimulate a wider study and understanding of this subject. It condenses a great many facts about milk into a short period of time. It is a splendid educational film, suitable for all ages of students, yet sufficiently informal to be used in an auditorium for general assembly. It may be adapted to many phases of the school curriculum.

Hidden Hunger. 16 mm., sound, showing time, 22 minutes. (Available through the courtesy of Swift & Company, Chicago.) This is a dramatic film of nutrition. A crusading farmer campaigns to reform the nation's eating habits. It shows the correct cooking procedures for preserving vitamins. It is suitable for lay audiences.

Surgery in Chest Disease. 16 mm., sound, showing time, 43 minutes. (Available through the courtesy of British Information Services, Houston.) A highly specialized medical film which, by tracing the history of a typical patient, illustrates the importance of thoracic surgery in the treatment of chest disease. The case is one of pulmonary carcinoma necessitating the removal of the lung, and all stages of diagnosis, operation and after-treatment are shown. Briefer references to other cases help to round out the general surgical picture. Suitable for medical audiences only.

Accident Service. 16 mm., sound, showing time, 40 minutes. (Available through the courtesy of British Information Services.) The general principles of industrial rehabilitation as practiced in peacetime are illustrated by means of an intensive study of the work at a rehabilitation center for injured coal miners. Close-up studies of certain operations give the film its strong medical slant, but the emphasis is on rehabilitation of the whole man by every possible means, including ingenious exercises, therapy, and an encouraging psychological atmosphere.

Your Children's Eyes. 16 mm., sound, showing time, 20 minutes. (Available through the courtesy of British Information Services.) Rest, recreation, and good food are necessary to healthy eyesight. Simple precautions on the part of parents and teachers can insure protection against eye strain. Medical advice must be sought in cases of organic defects or diseases, but the application of logical common sense in daily life will keep a healthy eye healthy. Amusing animated diagrams depict the physiology of the eye and explain what is meant by long and short eyesight.

The Story of D. D. T. 16 mm., sound, showing time, 25 minutes. (Available through the courtesy of British Information Services.) This film is exactly

what its title indicates—the story of D. D. T. (Dichlor Diphenyl Trichlorthane). Its discovery by a German scientist during the Franco-Prussian War, its re-discovery and improvement by British and American scientists early in the recent war, with its peacetime application to help bring about a better and cleaner world for everyone, are graphically depicted.

NATIONAL SOCIETY TO AID ANIMAL EXPERIMENTATION

A new organization, the National Society for Medical Research, has been formed for the protection of animal experimentation in biology, medicine, dentistry, pharmacy, and veterinary medicine.

Plans for the new society were drafted during the recent two-day meeting in Chicago of the Congress on Medical Education and Licensure, sponsored by the Council on Medical Education and Hospitals of the American Medical Association and the Federation of State Medical Boards. The society's general functions will be:

1. Education of the public relative to the necessity, importance, humane character, and accomplishments of animal experimentation in medicine and biology.

2. Aid in preventing the enactment of national and local legislation restrictive to animal experimentation.

3. Promotion of legislation providing for the protection of animal experimentation in medicine and biology.

Commenting editorially on the program in its February 23 issue, *The Journal of the American Medical Association* says:

"The threat to medical progress by interference with animal experimentation should be met at the national level by a strong organization whose influence can supplement and coordinate local activities and maintain a continuous program of educating the public regarding the necessity, the humane character and the fruits of animal experimentation in medicine and biology. Such an organization is now under way. Under the auspices of the Association of American Medical Colleges and with the coöperation of other groups a nationwide organizing board of directors has been selected. This group met in Chicago February 11 at the time of the Congress on Medical Education and Licensure, selected the tentative name National Society for Medical Research, elected Dr. A. J. Carlson (Department of Physiology, University of Chicago) chairman and Dr. Andrew C. Ivy (Department of Physiology, Northwestern University) secretary and appointed an executive committee consisting of the chairman, the secretary and Drs. C. Sidney Burwell (Dean of Harvard Medical School, Boston), Eben J. Carey (Dean of Marquette University, Milwaukee, Wis.), L. R. Chandler (Dean of Stanford University, San Francisco), Victor Johnson (Secretary of the Council on Medical Education and Hospitals of the American Medical Association), and Chauncey D. Leake (Dean of the University of Texas, Galveston)."

Continuing the editorial says:

"The materials and financial resources of the Friends of Medical Research of the state of New York have been pledged to the new organization, and many medical schools have given support and funds. Additional support must come from other medical schools, state and county medical societies, academies of medicine, national professional organizations in biology and medicine, the ethical drug houses and physicians and scientists generally. . . .

"An intensification of the fight to cripple or destroy medical research by legislative prohibition of animal experimentation met its first defeat recently in the New York legislature. This conflict has been waged perennially; in some states the convening of the legislature is virtually a date to include on the medical school calendar, like the opening of the fall school session or the dates of the Christmas vacation period. Efforts to hamper or prevent animal experimentation by law are now under way in several other states, including Massachusetts and in Washington, D. C. (by Congressional action)."

Dr. Carlson, who has been active in the formation of the new society, told the organizing group that "it's time that we lead an all-out attack against federal and state legislation which would prohibit or impede animal experimentation. . . .

"The moral code of civilized man," he said, "reads thus: As between man and animals, man comes first. This is the law of life. But when man uses or destroys animals for man's own protection, aid and other needs, such use must be conducted without cruelty. Certainly it cannot be immoral to use animals humanely to mitigate human suffering due to disease, as long as we believe animals may be sacrificed for human food and clothing. If man is not worth more than the dog, then our efforts to improve man are an error.

"We use animals, by common consent, for food, for clothing, for labor, for pleasure. How can it be wrong to use animals humanely to increase our understanding of life, our control of disease, both of which contribute to human happiness? We must retain a sense of proportion."

O. P. A. ADVISORY COMMITTEE STATEMENT ON SUGAR

The Subcommittee on Medical Food Requirements of the National Research Council, which advises the Office of Price Administration on appeals requesting more than the regular ration of sugar because of illness, has submitted to the Washington O. P. A. the following opinion:

"Additional rationed sugar, beyond the 15 pounds per capita per year now allocated under current rationing regulations, is not essential in the treatment of any disease, because unrationed sources of carbohydrate, including syrups, preserves, and processed fruits and juices, are now readily available to provide a source not only of readily assimilable carbohydrate, but also a wide range of palatable substances calculated to appeal to the palate of individuals, sick and convalescent, whose appetites have been impaired by illness."

ARMY PSYCHIATRIC CONTRIBUTIONS

Civilian institutions can profit by the gains made by the Army in the field of psychiatry, Brigadier General William C. Menninger, Director of the Neuropsychiatry Consultants Division, said recently in a statement on the experiences of the Army with nervous and mental cases in World War 2.

The marked strides made in neuropsychiatry, which represent one of the major achievements of the Medical Department, were made possible through the skill and knowledge of many of the nation's outstanding psychiatrists, collaborating in the treatment and prevention of neuropsychiatric cases at a time when there were more cases of this type than medical science had ever dealt with before. The size of the problem is indicated in the fact that 314,500 men had been discharged by July 1, 1945, for neuropsychiatric causes. This figure represents 43 per cent of the soldiers discharged for medical reasons. In addition, there were 130,000 more men discharged because of personality defects which made them unsuitable for the Army. The picture becomes even darker, considering that out of 4,650,000 men rejected

for all causes, 1,825,000, or 39 per cent, were rejected for some type of personality disorder.

Two major innovations in Army treatment of neuropsychiatric cases have been psychotherapy under sedation and group psychotherapy.

In psychotherapy under sedation, which is sometimes referred to as narcosynthesis, narcoanalysis, abreaction, and hypnoanalysis, the patient is given an intravenous dose of a sedative drug, bringing him to a state of semistupor in which he is encouraged to talk and relive the emotional experiences which helped bring about his condition. Frequently these patients could not talk about these experiences before the treatment and often did not remember them. With the help of a skilled psychotherapist, the patient is given "free and adequate drainage" for his emotional tension, which is a factor in his recovery. The Army has also found that with the proper handling of a case, good results may be obtained when a man is hypnotized and an "emotional catharsis" is produced similar to the results obtained when the drugs are used.

The increased use of group psychotherapy constitutes the second outstanding development in psychiatric treatment during the war. Under the leadership of a psychiatrist, a group of patients with similar problems meet an hour a day for ten to thirty discussions. The groups are usually from about fifteen to twenty-five men. The patients, under the leadership of a skilled therapist, compare experiences, discuss their problems, and through the insight gained in their cases good results are obtained in a fair percentage of patients treated in this manner.

General Menninger pointed out that the Army's experiences in the Medical Department provide convincing proof that the modern physician must become acquainted with psychological medicine and the dynamics of personality adjustment, as well as with the physical aspects of medical practice. Recent surveys in wards treating patients suffering from heart disease and gastro-intestinal trouble showed that in as high as 41 per cent of the cases there was no organic trouble.—S. G. O. Notes, Jan. 31, 1946.

HOSPITAL EQUIPMENT FOR EUROPE

Complete outfits for twenty-eight hospitals, totaling more than 26,000 beds, are on the way to three stricken countries in Europe as result of efforts of special representatives of the United Nations Relief and Rehabilitation Administration, according to word received at the agency's Washington headquarters.

The hospital outfits, purchased from Army surpluses in the United Kingdom and on the European continent, are being trucked or shipped by sea to Poland, Czechoslovakia, and Yugoslavia. After VE-Day, the Army intended to trans-ship the outfits to Japan, but victory in the Pacific made that unnecessary. Hence, thousands of sick men, women, and children in the three countries will have available in a short time hospital facilities which otherwise probably would not have been open to them for years.

The outfits are so complete that they include everything from surgical instruments to beds and blankets, account books and case record charts.

Diseases resulting from malnutrition, exposure, and filth have swept across Poland, Czechoslovakia, and Yugoslavia. Tuberculosis and venereal infections have shown vast increases. The need for hospital facilities, according to reports by UNRRA missions and appeals from the European countries, is far greater than before the war began. But the hospitals which existed at that time were systematically looted by the Axis, and in many cases destroyed. Hence, the governments appealed to UNRRA for aid.

A group of experts from UNRRA's division of Medicial Supply in Washington went to Europe several months ago to negotiate for purchase of surpluses to meet the need as far as possible.

On the European continent, they purchased fourteen 1,000-bed hospital outfits and one 500-bed outfit which were assembled at Marseilles, France. Two of the large units were loaded in a truck convoy and sent overland to Czechoslovakia. The others are proceeding by sea to Poland.

In Great Britain the UNRRA group obtained ten 1,000-bed, one 750-bed, and one 400-bed outfits which are scheduled for immediate shipment to Poland, and one 1,000-bed outfit scheduled to go to Yugoslavia. The latter unit will be used for treatment of tuberculosis patients.

In addition to their work in obtaining the larger units, the UNRRA medical supply men are continuing to comb military surplus stock to obtain equipment for approximately forty-five convalescent centers which will be able to handle less serious cases of illness and those which are enabled after treatment to be moved out of the hospitals to make way for other serious cases.

UNRRA will not supply buildings for the hospitals. The individual governments will furnish them, and the outfits furnished by UNRRA will transform them into operating institutions.

TREATMENT OF SHOCK WITH REFRIGERATION

Treatment of shock by refrigeration is a revolutionary technic which has developed during the last six years, according to two doctors writing in the January 26 issue of *The Journal of the American Medical Association.*

Lyman Weeks Crossman and Frederick M. Allen, both from the City Hospital of New York, say that cold reduces pain and swelling, preserves injured tissue, restrains infection until the patient is strong enough to undergo an operation, and serves as a shockless anesthetic in surgery. Shock is a profound depression of bodily functions caused by injury or strong emotion.

The treatment of shock by reducing the body temperature is precisely opposite to the tradition of blankets, hot water bottles and electric light cradles. According to the authors "both clinical and experimental observations now leave no doubt that the difference between high and low environmental or bodily temperatures can amount to the difference between life and death in shock."

Refrigeration retards shock, affording a greater length of time for other treatment and better ability to respond to it. Within limits, the lengthened survival can be converted into permanent recovery by the simple administration of fluids by mouth or by salt solution injected beneath the skin.

The essential feature in shock is a need for fluid in the tissues. Drs. Crossman and Allen contend that the points of superiority of salt solution over plasma, the accepted treatment, are that "it is more conveniently and abundantly available, is tolerated safely in larger quantities and passes most readily into the tissues to supply their specific need for fluid and salt."

SUBACUTE BACTERIAL ENDOCARDITIS

Twenty patients with subacute bacterial endocarditis, a disease involving inflammation of the lining membrane of the heart and previously considered fatal, were treated with penicillin last year at the University of Pennsylvania Hospital, with the result that 16 had definite subsidence of their infection. Of these 12 are still alive, 8 having died of other complications, according to a report in the

November 24 issue of *The Journal of the American Medical Association.*

Harrison F. Flippin, M. D., Robert L. Mayock, M. D., Franklin D. Murphy, M. D., and Charles C. Wolferth, M. D., with the technical assistance of Marjorie Wiley, Philadelphia, wrote that "we employed 300,000 units of penicillin a day for fourteen days as the initial course. This appeared adequate in 14 of the 20 cases. However, in view of subsequent experience with 16 additional cases of the disease, not included in this report, we believe that all patients with subacute bacterial endocarditis should receive at least 500,000 units a day for at least five weeks."

The penicillin was injected into the veins of the patients, but, according to the authors, there is no reason to believe this method is superior to injections into the muscles.

Subacute bacterial endocarditis usually attacks valves of the heart that are already damaged. The germ which is responsible for the condition in 90 to 95 per cent of cases is the Streptococcus viridans, while the gonococcus and the influenza bacillus are the causes in 5 to 10 per cent.

Since infection is so dangerous in this disease, the authors urge "as a precaution against reinfection, a careful search for possible foci of infection, such as infected teeth and tonsils, should be made."

Although only 12 patients lived, the authors wrote that "of the 8 who did not survive 4 were completely free of active infection and died as a result of heart disease. Three patients in this group failed to respond to therapy, and the eighth died soon after treatment was completed as a result of an acute pulmonary embolus."

REFRESHER TRAINING FOR DOCTORS LEAVING SERVICE

Refresher training of twelve weeks' duration will be given Army doctors leaving the service who desire to brush up on latest developments in fields of medicine, surgery, or neuropsychiatry in which they may not have been actively practicing during the past year, Major General Norman T. Kirk, Surgeon General of the Army, has announced.

This training, which will prepare retiring Army doctors for return to private practice with latest knowledge of medical advances made during the war, will be given at Army hospitals until June 30, 1946. Reserve Corps, National Guard, and A. U. S. Medical Corps officers who are to be separated will be eligible for this schooling. The election of the period of refresher training is entirely voluntary. Medical officers cannot be recalled to active duty from terminal leave for the purpose of accepting a professional assignment for refresher training.

The Surgeon General emphasizes the fact that the refresher training is accomplished by a twelve-week temporary duty assignment in the professional field of interest at an Army hospital without per diem. Such an assignment will afford the medical officer a period of clinical work under supervision, and excellent opportunities for collateral study of recent advances in medicine, surgery, and neuropsychiatry. —S. G. O. Notes, Dec. 31, 1945.

TRANSACTIONS OF EXECUTIVE COUNCIL OF STATE MEDICAL ASSOCIATION

The Executive Council of the State Medical Association met at the Texas Hotel in Fort Worth Sunday, March 24, 1946, with President Dr. H. F. Connally presiding. Members of the Council present included *Officers:* Dr. H. F. Connally, Waco, president; Dr. Holman Taylor, Fort Worth, secretary; *Board of Trustees:* Dr. T. C. Terrell, Fort Worth, secretary; Dr. E. W. Bertner, Houston, vice-chairman; *Board of Councilors:* Dr. E. A. Rowley, Amarillo, District 3; Dr. C. E. Scull, San Antonio, District 5, chairman; Dr. R. T. Wilson, Austin, District 7, secretary; Dr. F. J. L. Blasingame, Wharton, District 8; Dr. J. E. Clarke, Houston, District 9; Dr. M. O. Gibson, Lufkin, District 10 (representing Dr. A. E. Sweatland, Lufkin); Dr. Leroy Trice, Palestine, District 11 (vice-councilor); Dr. C. C. Nash, Dallas, District 14; *Committee on Legislation:* Dr. H. F. Connally, Waco (ex-officio); Dr. Holman Taylor, Fort Worth (ex-officio); Dr. J. H. Burleson, San Antonio, chairman; Dr. J. Allen Kyle, Houston; Dr. L. H. Reeves, Fort Worth.

Guests invited to attend and participate in the meeting included *Council on Medical Economics:* Dr. H. E. Griffin, Graham, chairman; Dr. H. R. Dudgeon, Waco; Dr. W. A. Lee, Denison; *Public Relations Committee:* Dr. R. B. Anderson, Fort Worth, chairman; Dr. Merton M. Minter, San Antonio; Dr. R. A. Miller, San Antonio; and Mr. Jeff L. Reese, Fort Worth, director of public relations; Mr. Philip E. Fox, Dallas, public relations counsel; Mr. C. T. Freeman, Sherman, legal counsel; Mr. Phil Overton, Dallas, legal counsel for Texas Hospital Association; Dr. E. H. Cary, Dallas, president of Group Medical and Surgical Service; Mr. Jay Ketchum, Chicago, director of the Division of Prepayment Medical Care of the Council on Medical Service and Public Relations of the American Medical Association. Also present were Drs. Y. C. Smith, Corpus Christi, and C. O. Terrell, Fort Worth.

Dr. Taylor was requested to read a tentative report to date of the Council, for presentation to the House of Delegates. Dr. Taylor pointed out that members of the Council would be contacted by mail for suggestions, revisions, and approval at a later date.

The question of what recommendation the Council should make to the House of Delegates with regard to the program of the American Medical Association to spread prepayment medical service coverage to the greatest extent possible was next considered. At the request of President Connally, Dr. Anderson pointed out that the Council should recommend some course to the House of Delegates in order that definite action would be taken. He indicated that there are three courses which could be followed: (1) continue as the Association is now doing, recommending no specific plan but approving all voluntary nonprofit prepayment plans which measure up to satisfactory principles; (2) adopt some plan already in existence as the official plan of the Association; or (3) develop a plan from "scratch." Dr. Anderson said that in order to have expert advice on the matter, the American Medical Association Council on Medical Service and Public Relations had been requested to send to the Executive Council meeting, Mr. Jay Ketchum, who is with the Michigan Medical Service and has recently been made director of the Division of Prepayment Medical Care of the Council on Medical Service and Public Relations. Dr. Anderson further pointed out that the Dallas County Medical Plan, Physicians Personal Service Plan of Stamford, and Group Medical and Surgical Service are the only nonprofit medical care plans now operating in Texas, so far as is known, and that a group from the State Medical Association, with Mr. Ketchum, and representatives of Group Medical and Surgical Service, had held a conference in Dallas the preceding day (March 23), discussing the possibility and desirability of the Association adopting Group Medical and Surgical Service as its plan. He said that Group Medical and Surgical Service was eager to secure approval of the Association and that the way seemed open for coöperation. He then presented Mr. Ketchum.

Mr. Ketchum reported that there are in operation in the United States 61 volunteer medical service plans sponsored by state or county medical societies, 8 states in process of organizing such plans, 8 states

studying such plans, and 7 states with no plans and making no studies. He indicated that following preliminary meetings of various groups interested in such programs, the House of Delegates of the American Medical Association at its meeting in December, 1945, had passed a resolution urging as rapid development of prepayment medical care plans as possible. In accordance with this resolution, the Council on Medical Service and Public Relations of the American Medical Association established a prepayment plan division and adopted a set of standards for prepayment plans. Mr. Ketchum added that the standards adopted by the A. M. A. Council were similar to those adopted by the Council on Medical Economics of the State Medical Association of Texas. He indicated that with the difficulties posed by the area and geography of Texas, the State Medical Association would have considerable difficulty in working out the problem on a service basis as has been done in Michigan, for example, particularly within a short period of time. He pointed out as an aside that Michigan had found two main problems in its plan—the setting of rates and professional relations. Since a medical service plan similar to the Michigan set-up is not practicable for Texas, Mr. Ketchum suggested that the next best plan would be to approve, with a few changes, the Group Medical and Surgical Service plan already established by Group Hospital Service. Although this service now operates with limited benefits, Mr. Ketchum thought they could be expanded later. He suggested that in order to bring the plan into line with the standards of the American Medical Association, Group Medical and Surgical Service should specify that a certain proportion, perhaps one-third or more, of its board of directors should be nominated by the State Medical Association or have its approval, and that there should be a medical advisory committee to determine fees for medical procedures.

Dr. Taylor wanted to know if the Group Medical and Surgical Service plan could, under its charter, make a contract with the State Medical Association. Mr. Ketchum said it could.

Dr. Rowley asked if the State Medical Association could make such a contract.

Dr. Anderson said it would not be necessary to make a contract, that to secure approval of the American Medical Association or the State Medical Association, Group Medical and Surgical Service would have to have on its board of directors doctors nominated by the State Medical Association, which would require a change in the by-laws of Group Medical and Surgical Service but would not require any sort of contract. He further pointed out that the State Medical Association could approve any other plan of this sort, but that Group Medical and Surgical Service happened already to be in operation and therefore available.

Dr. Rowley stated his opinion that the State Medical Association should approve the principles of the American Medical Association, but that it should not go into the insurance business or make contracts or endorse one company.

Dr. Burleson requested that the resolution on the subject of prepayment medical care plans which he had introduced in the State Medical Association House of Delegates in Dallas in 1944, be read. This resolution (see June, 1944, JOURNAL, p. 86), Dr. Burleson pointed out, was designed only to authorize approval of plans, but the Association must meet the needs of the public. Group Medical and Surgical Service is a nonprofit organization and not in conflict with other good plans for prepaid medical care, and it is statewide in coverage.

Dr. Anderson insisted that while Dr. Rowley wants to endorse only principles, the American Medical Association has set up machinery to approve specific plans, and to secure A. M. A. approval a plan must first have the approval of a state medical association. He compared the approval which the A. M. A. Division on Prepayment Medical Care Plans would give to the approval being given by the Council on New and Nonofficial Remedies, Council on Physical Therapy, Council on Foods and Nutrition, and other A. M. A. councils. He said again that the State Medical Association does not have to enter a contract.

Dr. Rowley wanted to know whether, if a company measures up to the principles necessary for approval, the Association has not already approved the company because it has approved the principles.

Mr. Ketchum replied that there is more to the problem than just approval. The American Medical Association will approve only insurance approved and "accepted" by county or state medical societies. The proponents of the Wagner-Murray-Dingell bill will want to know what specific steps Texas has taken.

Dr. Rowley said that the Blue Cross Hospital plan has developed satisfactorily without approval of the medical associations.

Mr. Ketchum said that the only approval necessary with Group Medical and Surgical Service is to approve the doctors on the board, which would help coördinate the national medical service plan.

Dr. Connally reported that members of the Legislature and Congress had asked him what the doctors have done to further medical service plans, and that it would be easier for them to get behind an established plan such as Group Medical and Surgical Service.

Dr. Bertner asserted that it was misleading to say that the State Medical Association should or would endorse *one* plan.

Dr. Connally said the Association could approve *any* company which measures up to the accepted standards.

Mr. Ketchum pointed out that the only reason for approving *one* plan now is to get action.

Dr. Dudgeon insisted that it is the duty of the Association to approve any company which meets the principles that have been adopted.

Mr. Ketchum, on request, clarified the situation by reading the principles set up by the American Medical Association.

Dr. Cary, as president of Group Medical and Surgical Service, was called on to speak on the subject. He pointed out that Group Hospital Service, which later developed Group Medical and Surgical Service, was not solely the child of the hospitals; that it has been developed from the beginning by doctors who have seen the necessity for plans to keep up with the moves of Wagner, Murray, Dingell and others. As Group Hospital Service continued, the people themselves began requesting the addition of medical and surgical benefits. Group Medical and Surgical Service was, therefore, organized. Dr. Cary expressed his belief that all insurance companies in operation will be required to care for insurance needs, and that coördination of effort under the American Medical Association will be valuable in securing greater benefits for those insured and in building a unified front. He assured the Council that doctors are running Group Medical and Surgical Service, and that whatever changes they want will be made.

Dr. Taylor wanted to know how the American Medical Association is coördinating the prepayment medical service plans.

Mr. Ketchum said that two things are being done: (1) Efforts are being made to convince county and state societies that they should do something about the matter, and to assist them in organizing; (2) coördination is being attempted by securing reciprocity in plans in different geographical areas and by adoption of uniform rates. So far, transfer among eighteen plans has been arranged. An organization of medical service plans is being set up to

coördinate their efforts. This organization is not under the American Medical Association but will include doctors in its membership.

Mr. Freeman asked for clarification on one or two points which had been discussed, and said that the legal questions involved had been covered.

Dr. Bertner made a motion recommending approval of the standards of acceptance of the Council on Medical Economics of the State Medical Association and those of the Council on Medical Service and Public Relations of the American Medical Association, and endorsement of any plans, including Group Medical and Surgical Service, meeting the principles. Dr. Reeves seconded the motion.

Dr. Taylor said the House of Delegates had already gone as far as Dr. Bertner's motion but that no plans have yet been endorsed. The idea is to get a unified front to show Congress, and some agent of the State Medical Association should be designated to take action with regard to such plans.

Dr. Bertner reminded that any action taken by the Executive Council would have to go before the House of Delegates for final approval, but that he would be willing to add to his motion a recommendation that an adjudication committee of nine specialists be included in the Council on Medical Economics to help set rates and attend to other business incident to approval of prepayment medical plans.

Dr. Nash wanted to know why only specialists were mentioned. Dr. Bertner replied that general medicine is considered a specialty.

Dr. Taylor wondered if too many different committees were being set up when the duties could be assigned to already existing committees.

Dr. Griffin pointed out that an emergency exists to report something to Washington and that so far only two counties have made any definite progress.

Dr. Minter added that the Wagner-Murray-Dingell and Pepper bills are coming up in Washington prior to the meeting of our House of Delegates, which creates a distinct urgency for action. He suggested that the President appoint a committee to write in definite and "quotable" form the motion which Dr. Bertner had made. With Dr. Bertner's approval, Dr. Connally followed Dr. Minter's suggestion.

Dr. Connally recessed the Council at 12:30 p. m. for lunch, during which time Dr. Anderson, Mr. Freeman, Mr. Overton, Mr. Ketchum, Dr. Cary, and Dr. Bertner, formulated a motion.

The Council reassembled and Dr. Bertner presented a discussion of the plans of the American Cancer Society to organize in Texas and to carry out a drive for funds to treat cancer patients and to help research on cancer. He requested the coöperation of the State Medical Association members.

Dr. Anderson reported for the committee which had prepared a motion to substitute for the one Dr. Bertner had made orally. It was moved:

"That the Executive Council recommend to the House of Delegates that the State Medical Association approve any statewide plan that meets the standards of acceptance of the Council on Medical Economics of the State Medical Association and the standards of acceptance of the Council on Medical Service and Public Relations of the American Medical Association; and

"Further, that the State Medical Association place its approval or 'acceptance' on Group Medical and Surgical Service, Inc., or any other statewide, nonprofit plan that makes provision in its by-laws for representation on its board of directors in numbers satisfactory to the State Medical Association, of physicians nominated by the State Medical Association of Texas; and

"Further, that Group Medical and Surgical Service or any other similar statewide plan to be so approved shall provide in its by-laws for an adjudication committee of nine members from the State Medical Association, representing all branches of medicine, the duties of which committee will be to determine the relative values of medical services and procedures as expressed by the plan's published schedule of benefits, and of those services and procedures not published."

Dr. Taylor wished to know how to deal with nonstatewide plans. Mr. Ketchum replied that county medical societies may approve county-wide plans such as, for example, the Dallas and Stamford plans.

The motion was passed unanimously.

The next problem for discussion was what action the Council should take regarding the coöperative hospital developments in Texas. Dr. Anderson outlined the background of the movement, pointing out that a law was passed by the Texas Legislature without either approval or disapproval of the State Medical Association, according to which law small towns might establish coöperative hospitals; that some of these hospitals were in operation; that some of the hospitals with perfectly good intentions were beginning to get "off the track" from the standpoint of medical ethics and legality; and that the State Medical Association should coöperate with them to get them back in line, because they can serve a useful purpose. It was pointed out that the farm groups supporting them are powerful politically and have almost unanimously expressed their opposition to political medicine.

Dr. Dudgeon wondered if the problem could not be solved by telling the hospitals they would have the blessing of the State Medical Association if they provided for the free selection of doctors and for the confidential relationship of doctor and patient.

Dr. Taylor stated this would not entirely solve the problem, pointing out, for example, that some doctors are working for a salary.

Dr. Anderson expressed the view that the Council should approve an "across the table" plan of thrashing out problems with the hospital groups.

Dr. Rowley thought three coöperative hospitals in his district about which he knew were primarily stock selling schemes. Other members of the Council expressed additional views on the subject, but began relating the coöperative hospital problem to the Hill-Burton bill.

Dr. Anderson stated that the Hill-Burton bill had nothing to do with the coöperative hospital question originally posed; that such hospitals were being built under a state rather than a federal law.

At this point in the discussion, representatives of the press requested a report of the Council meeting. Dr. Anderson asked for the view of the Council as to what should be released to the newspapers on the motion passed on the prepayment medical care plan. After brief discussion, Dr. Minter, Dr. Miller, and Mr. Fox, representing the Public Relations Committee, were requested to meet with the press and work out a release satisfactory to both parties, it being agreed by the Council that publicity should be given to the definite action toward approving prepayment plans which had been taken at the meeting.

Returning to the discussion of coöperative hospitals, Dr. Wilson moved that the Council recommend to the House of Delegates that the Public Relations Committee be made responsible for dealing with the coöperative hospitals. The motion was seconded by Dr. Nash and passed.

The question of what action to take with regard to the Veterans Administration program was brought up. Dr. Burleson insisted that the less the State Medical Association is tied up with the Veterans Administration, the happier and better off both will be.

Dr. Connally pointed out that the Veterans Administration has a good program

Dr. Nash said that Washington tells the doctors how much they are going to get paid and that it is not very much. Dr. Connally reviewed his personal experience with the Veterans Administration,

saying that while he is paid less for surgical work than he would receive in private practice, he does not spend as much time on veterans cases because he does not have to go back and take care of the patient after the surgery has been performed.

Dr. Taylor said the State Medical Association could not contract with the government under its present set-up.

Dr. Rowley quoted a colonel in the Veterans Administration as saying that there are 1,700 doctors in the Administration and 20,000,000 persons to care for. Dr. Rowley suggested that with such figures being advanced, the Veterans Administration would bring socialized medicine without having it voted in.

Dr. Dudgeon reported that Major General Paul R. Hawley, Acting Surgeon General of the Veterans Administration, in speaking before the House of Delegates of the American Medical Association had told of the plans of the Veterans Administration to enlist the aid of civilian specialists and to pay them fees agreed on by the specialists and the government, and that the House of Delegates had cheered General Hawley. Dr. Dudgeon wondered why the Council could not approve the plan of care of veterans as outlined in the House of Delegates speech, which indicated also that veterans would choose their own doctors and hospitals insofar as possible. Upon assurance of the Secretary and the President that he was privileged to make motion for action at this conference, Dr. Dudgeon put his suggestion in motion form: that the Association approve the care of veterans as outlined by General Hawley in his talk before the House of Delegates of the American Medical Association and as adopted by the American Medical Association.

Dr. Rowley said he was opposed to the motion; that there is no difference in a man working on a salary for the government and for a hospital cooperative.

Dr. Bertner suggested that the motion should outline what General Hawley said so that the press would not misunderstand. Dr. Dudgeon agreed that an abstract of the speech could be made a part of the motion.

Dr. Anderson said that General Hawley has done in the Veterans Administration what the doctors wanted, by not building great numbers of hospitals located for political expediency and by using civilian practitioners for out-patient care. He pointed out that under resolutions adopted by this Council and supported by the House of Delegates, the State Medical Association cannot make contracts with the Veterans Administration.

Dr. Rowley said that while veterans are treated free, they are not used as teaching material.

Dr. Nash said that at the hospital at Lisbon, outside Dallas, veterans are being used for teaching, but added that the hospital is using physicians from colleges to do the work while the Veterans Administration doctors do nothing.

Dr. Burleson thought the medical profession would take care of the veterans one way or another, and the safest thing to do is to continue to care for veterans without government contract. Dr. Connally agreed.

Dr. Taylor explained that following World War I the Veterans Administration paid so little salary to its doctors that few competent physicians would work for the Administration, and that therefore the American Medical Association would not recognize the Veterans Administration doctors as a group, as it does those of the Army and Navy; but that the Veterans Administration is now about to pay enough salaries to have competent staffs. He thought it would be safe to approve the idea of government employment of physicians on a satisfactory basis.

Dr. Anderson said that the Veterans Administration will be coming to the State Medical Association and to the county societies to decide on contracts, and that members must know what position to take. He suggested as a possible counter proposal to Dr. Dudgeon's motion a recommendation that members of the State Medical Association continue to assume responsibility in the medical care of veterans, without any contractual obligation being made between county medical societies and the Veterans Administration.

Dr. Dudgeon insisted that endorsing General Hawley's plan would not commit the Association to anything.

Dr. Anderson said that neither the State Medical Association nor county medical societies could make contracts with governmental agencies for medical care without rescinding previous action of the Association, but that as individuals, members of the Association could make contracts with the Veterans Administration.

Dr. Burleson questioned the necessity of doing something which would draw criticism when the doctors would take care of the veterans anyway.

Dr. Dudgeon withdrew his motion.

The next item on the agenda was introduced at the request of Dr. Connally by Dr. Anderson. He said that looking forward to passage of the Hill-Burton bill now pending in Congress, a survey on hospital and public health facilities in Texas is under way. County medical societies have been asked to appoint hospital survey committees to insure the gathering of accurate statistical data. He said the Hill-Burton bill appears to harbor a danger which had not previously been realized: the Surgeon-General is given authority to demand at any time accounting and other records of a hospital built under provisions of the bill.

Mr. Overton, who had attended hearings in Washington on the Hill-Burton bill, expressed the opinion that the bill is really intended to socialize medicine, that the bill will pass, and that efforts must now be made to control it.

Dr. Taylor said he understands that the advisory committee for the hospital survey, which is presently composed of hospital administrators and physicians, will be expanded to include management, labor, and other groups.

Mr. Overton agreed that Mr. Norman B. Roberts, who is directing the survey for the State Board of Health, and Dr. George Cox, State Health Officer, want to add management and labor to the advisory committee. He declared that the Texas Hospital Association, for which he has been authorized to talk with regard to the problem under discussion, will follow the lead of the physicians in holding the line for a small committee. He said that in his opinion the biggest danger of socialized medicine is the State Health Department, and that the doctors of the state should get busy on that point.

Dr. Anderson reported that a full meeting of the advisory committee will be held soon.

Mr. Overton requested the privilege of pointing out to the Executive Council that if the State Medical Association gave the same support to Jeff Reese that the Texas Hospital Association gives him (Overton), the two organizations could really get things done in the interest of the public health.

Dr. Anderson read a letter from a member of the American Academy of Pediatrics requesting approval by the State Medical Association of a survey of child health to be made by the Academy with the coöperation of the Children's Bureau and of the U. S. Public Health Service. A second letter assured that the Academy would maintain full control over the survey and that coöperation from the two government agencies would consist primarily of clerical assistance.

Dr. T. C. Terrell moved that the Academy be allowed to make its proposed survey without the State Medical Association doing anything about it. Dr. Kyle seconded the motion, which carried.

Dr. Anderson announced a public relations conference on Monday, March 25, at the Texas Hotel, at which meeting members of the Executive Council would be welcome.

The meeting was adjourned at 3:30 p. m.

LIBRARY NOTES

The package library consists of collections of reprints and other periodical material on various subjects, prepared for lending to members of the Association. Requests for packages should be addressed "Library, State Medical Association of Texas, 1404 W. El Paso Street, Fort Worth, Texas." Twenty-five cents in stamps should be enclosed with the request to cover postage and part of the expense of collecting the material. Only one package may be borrowed at a time, and packages are allowed to remain in the hands of the borrower for 14 days.

Package Service

Packages were mailed from the Library of the State Medical Association during March, as follows:

Southwestern Medical College, Dallas—(1 journal); (3 journals).

Dr. H. Caplovitz, Houston—*Raynaud's Disease* (15 articles).

Dr. L. Villareal, El Paso—*Ductus Arteriosus* (10 articles).

Dr. Martin Hoch, Smithville—*Liver, cirrhosis* (22 articles).

Dr. Osler Y. Janes, Cooper—*Coccidioidomycosis* (28 articles).

Dr. A. J. Bohman, Cuero—*Face, cancer* (10 articles).

Dr. W. R. Curtis, El Paso—*Urinary Tract, infections* (7 articles).

Dr. I. Warner Jenkins, Waco—*Sarcoma, melanosarcoma* (18 articles).

Dr. C. L. McClellan, Kerrville—*Penicillin* (4 articles).

Dr. R. K. O'Laughlin, Lubbock—*Breast, hypertrophy* (2 articles).

Mr. Jimmy Phillips, Freeport—*Licensure, medical* (3 articles).

Dr. B. L. Jenkins, Clarendon—*Arthritis, rheumatoid* (13 articles).

Dr. W. L. Bush, Greenville—*Pancreatitis* (14 articles).

Dr. W. Mood Knowles, Dallas—*Otorhinolaryngology* (20 articles); *Syphilis* (3 articles); *Thyroid, hypothyroidism* (3 articles); *Thyroid, hyperthyroidism* (11 articles).

Dr. W. S. Parks, Slaton—(1 journal).

Dr. E. W. Wright, Bowie—*Varicose Veins, therapy* (16 articles).

Dr. P. C. Pedigo, Strawn—*Carbon Monoxide, toxicity* (10 articles).

Dr. A. M. Patterson, Mineral Wells—*Ringworm* (13 articles).

Dr. F. T. McIntire, San Angelo—*Vena Cava* (6 articles).

Dr. C. B. Batson, Lubbock—*Thrombosis, coronary* (12 articles); *Coronary Vessels, occlusion* (16 articles).

Dr. A. B. Goldston, Amarillo—*Thrombophlebitis* (9 articles).

The Stout Clinic, Sherman—*Schistosomiasis* (14 articles).

Dr. Olan Key, Lubbock—*Gallbladder, calculi* (7 articles).

Dr. D. Lyle Robertson, Wichita Falls—*Syphilis, congenital* (5 articles).

Dr. R. C. Miller, Lake Jackson—*Hospitals* (4 articles).

Dr. C. B. Carter, Dallas—*Electricity, injuries* (6 articles).

Dr. George E. Bennack, Raymondville—*Undulant Fever* (25 articles).

Dr. Marion R. Lawler, Dallas—*Peritonitis* (15 articles); *Prostigmine and allied drugs* (13 articles).

Dr. Frank B. Duncan, Amarillo—*Jaws, dislocations* (4 articles).

Dr. L. C. Heare, Port Arthur—*Glaucoma, therapy* (19 articles).

Mr. J. A. Place, Galveston—(1 journal).

Dr. George Jewel, Fort Worth—*Muscles* (8 articles).

Dr. R. M. Finks, San Angelo—*Prostigmine, therapy* (5 articles).

Dr. B. P. Knight, Slaton—*Prostigmine, therapy* (5 articles).

Dr. J. Lawrence Clark, Ennis—(1 book).

Dr. Scott E. McNeill, Beeville—*Inflammation* (18 articles).

Dr. H. L. Wilder, Pampa—(1 journal).

Dr. Heinrich Lamm, La Feria—*Chylothorax* (9 articles).

Dr. W. L. Powers, Wichita Falls—(1 journal).

Accessions

Boston, Meador Publishing Company—Kahn: Suggestions and Hypnosis Made Practical.

Philadelphia, W. B. Saunders Company—Bockus: Gastroenterology, Vols. II and III and Index.

Milwaukee, Lee Foundation for Nutritional Research—Wrench: The Wheel of Health; McCarrison: Studies of Deficiency Disease.

Summary

Reprints received, 1,017	Local users, 72
Journals received, 198	Borrowers by mail, 39
Items consulted, 231	Packages mailed, 431
Items taken out, 243	Items mailed, 431

Total items consulted and mailed, 905.

MOTION PICTURE LENDING LIBRARY

Motion picture films on medical subjects, 16 mm., both silent and sound, some in color, and suitable for either medical or lay audiences, are available for loan to county medical societies, hospital staffs, or individual physicians, on request. Borrowers will be required to pay only the cost of shipment of the films, by express, with insurance, and for any damage to films while in the hands of the borrower.

Requests for films should be addressed to "Motion Picture Lending Library, State Medical Association of Texas, 1404 West El Paso Street, Fort Worth 3, Texas." A list of available films, with descriptions, will be furnished on request.

The following motion picture films were loaned by the Motion Picture Lending Library of the State Medical Association during March.

Back to Normal (Available through the courtesy of the British Information Services)—Malone & Hogan Clinic-Hospital Staff, Big Spring.

Behind the Shadows (Available through the courtesy of Texas Tuberculosis Association)—Falls County Public Schools, Marlin.

Choose to Live (Available through the courtesy of the U. S. Public Health Service and the American Society for the Control of Cancer)—Delta Rho Delta Sorority, Dallas.

Eyes for Tomorrow (Available through the courtesy of the Hurst Eye, Ear, and Throat Hospital-Clinic, Longview)—Falls County Public Schools, Marlin.

From Moo to You (Available through the courtesy of the Borden Company, New York)—Morningside Pre-School Association, Fort Worth.

Immunization (Available through the courtesy of Lederle Laboratories, Inc.)—Jefferson County Public Schools, Beaumont.

Infantile Paralysis, Your Fight Against (Available through the courtesy of the National Foundation for Infantile Paralysis, Inc.)—Falls County Public Schools, Marlin.

Plain Facts (Available through the courtesy of the American Social Hygiene Association)—Jefferson County Public Schools, Beaumont.

Pneumonia, Diagnosis and Treatment (Available through the courtesy of Lederle Laboratories, Inc.)—Malone & Hogan Clinic-Hospital Staff, Big Spring.

Poliomyelitis, Sister Kenny Method of Treatment (Available through the courtesy of Dr. Herbert Hipps, Marlin)—Falls County Public Schools, Marlin.

Premature Infant, the Care of (Available through the courtesy of Mead Johnson & Company)—Malone and Hogan Clinic-Hospital Staff, Big Spring.

NEWS

Contributions to this department will be appreciated. News should be of general medical interest, such as public health activities, new hospitals, personal items of more than local value, etc. News for a particular number of the JOURNAL should be in the hands of the Editor not later than the fifteenth of the preceding month.

The American Physicians Literary Guild to encourage physicians in nonmedical writing was organized in San Francisco January 2 with Dr. James C. Janney, Boston, as president, according to *The Journal of the American Medical Association.* All physicians in America who write as an avocation are invited to join the guild and to submit their unpublished works for an exhibition during the annual session of the American Medical Association. A contest in which prizes will be awarded for various types of nonmedical literature is being sponsored in connection with the exhibition. Manuscripts for the competition must be submitted before June 1. Additional information may be secured from Dr. Francis H. Redewill, Secretary, Flood Building, San Francisco 2.

The Dallas Southern Clinical Society on February 26 elected new officers to assume leadership following the fifteenth annual spring clinical conference March 18-21, informs the Dallas *News.* Those elected were Drs. Milford O. Rouse, president; C. Frank Brown, vice-president; Glenn D. Carlson, secretary; and Howard K. Crutcher, treasurer. Drs. J. G. Kerr, Karl B. King, P. M. Girard, and Edwin L. Rippy were named to the executive committee.

Parkland Hospital Women's Auxiliary met at the Nurses Home of the hospital at Dallas on February 21 to hear Dr. Ozro T. Woods speak on current Dallas health problems, informs the Garland *News.* Reports were made on the current membership drive in which it is hoped to bring the auxiliary roll to 3,000 Dallas County women. Dues collected in this campaign will be used to purchase physical therapy equipment to aid victims of infantile paralysis, arthritis, and accidents. Mesdames Edward S. Marrs, Cecil O. Patterson, and E. G. Wadel are leaders in the campaign.

Hospitals and Clinics.—Stock in the Big Spring Hospital, established in 1928 by Dr. G. T. Hall and Dr. M. H. Bennett, has changed hands, Dr. Hall having dissolved his partnership with Dr. Bennett and having sold his stock in the hospital to Dr. Bennett, according to the Big Spring *News.* Dr. Bennett in turn has sold stock in the hospital to Dr. Clyde E. Thomas, Jr., recently returned to his native town after discharge from military service, and to Dr. E. H. Strauss, for eight months a member of the Hall-Bennett Clinic staff. The hospital will continue operation under the same name. A new building will be erected east of the hospital, where a Bennett-Thomas-Strauss Clinic will be established and a nurses home will be provided. Dr. Hall will continue to practice medicine in Big Spring and to have access to the Big Spring Hospital for his patients.

The Baptist churches of southeast Texas are working toward raising $600,000 to build a hospital in the area, the Beaumont *Journal* reveals. Plans have been made to canvass physicians, surgeons, and dentists in that part of the state since they are aware of the lack of hospital facilities. Announcement has been made of a $25,000 gift from the Magnolia Petroleum Company and of $10,000 from other commercial and industrial sources, bringing the grand total early in March to $290,000.

Granbury General Hospital was formally opened February 24, report the Granbury *Tablet* and Gainesville *Register.* The twenty-bed structure, completely modern in its surgery, x-ray, and nursery departments, was erected by Dr. L. G. Ballard, practicing physician in Granbury since 1942, and Dr. J. O. Carr, former city health officer in Midlothian and collaborating epidemiologist with the U. S. Public Health Service who came to Granbury last December.

A new medical clinic building in Beaumont will be completed within the next few months according to plans of Dr. Dudley English and Dr. P. N. Fortney, states the Beaumont *Journal.* The L-shaped structure, to cost approximately $30,000 or $35,000, will have space for Dr. English, Dr. Fortney, Dr. J. Merlin Barry (also practicing in Beaumont at present), another physician, and a dentist.

A **Port Arthur Medical Arts Building** is being planned by a company organized for that purpose, informs the Port Arthur *News.* Dr. L. C. Heare is president of the company; Dr. George Sladczyk, vice-president; Dr. E. C. McRee, secretary; and Dr. J. R. Kuebler, treasurer. Stockholders also include Drs. A. M. Autrey, I. M. McFadden, T. W. Martin, D. H. Byram, L. Carter and H. B. Williford, the latter now of Beaumont. Plans called for a one-story brick structure costing about $85,000 which would provide offices for ten physicians, surgeons, specialists, and a dentist.

A **Blood Test Campaign in San Antonio** during February resulted in thousands of volunteer tests, according to the San Antonio *Light.* Dr. Walter S. Green, chief of the venereal disease control division of the city health department, was chairman of the campaign, which revealed approximately 4 per cent positive results among those tested. Members of the Bexar County Medical Society assisted in the campaign by encouraging their own patients to have the test and offering their services free in taking the blood for testing. Three downtown blood-testing stations were also maintained. The Chamber of Commerce, Retail Merchants, and other organized groups coöperated in the venereal disease drive, in which it was stressed that persons showing positive reactions would be informed confidentially of the results.

The Lubbock Junior Welfare League's Well Baby Clinic will continue to be one of the outstanding community projects of the league as a new group of officers is installed, reports the Lubbock *Avalanche.* Organized in 1939 and financed wholly through efforts of league members, assisted by three pediatricians who give of their time without remuneration, the clinic serves only those persons financially unable to give their children "normal" medical attention. Drs. M. H. Benson, Pauline Miller, and Arthur Jenkins have worked with the clinic since its establishment. Mrs. Marshall Harvey and Mrs. Hayes Sieber, who have been co-chairmen of the league's clinic committee, are continuing in that capacity although new officers were installed in March. Mrs. Durwood Bradley and Mrs. Weston Pettey constitute a clinic advisory committee. A registered nurse helps the doctors at the monthly clinics and visits the homes of the children who have come to the clinic. Also assisting are fifteen league members who have taken special training for the work. From thirty to sixty children are examined at the clinic each month; usually they range

in age from birth to 2 years. Serums and vaccinations covering five major childhood diseases are administered, an attempt is made to teach parents how to care for the children, and food and other needed purchases are made when necessary. The league underwrites the $2,400 to $3,000 expenses of the work, depending upon its own efforts in sponsoring amusement and educational programs to raise the money.

An Angelina County Health Unit remained in the tentative stage after a visit to the county commissioners by delegates from the Lions Club and Junior Chamber of Commerce in February, according to the Lufkin *News*. Most of the commissioners expressed interest in establishing a unit after hearing three of the delegates explain its benefits and its costs, but no money was available immediately to finance such a project. Estimates were that maintenance of a unit would cost $16,340 for a year, with a director, two nurses, a sanitarian, and a clerk. The court was requested to lay the groundwork for a health unit and give assurance of setting up an appropriation for the future. The county judge agreed to approach the state attorney general for a ruling on transfer of funds from the permanent improvement fund for allocation to a health unit, but there was little encouragement that satisfactory financial arrangements were in sight.

The Journal Club met in Waco March 6 with Dr. Howard Dudgeon presiding and Dr. Brian Aynesworth as secretary, informs the Waco *Times-Herald*. Club members, who meet monthly for synopses and discussion of medical journal articles, heard Dr. Paul Power review articles on skin disease, Dr. A. O. Manske on pediatrics, Dr. D. D. Warren on internal medicine, and Dr. W. J. Woolsey on eye, ear, nose, and throat.

The Postgraduate Assembly of Negro Physicians had its tenth annual meeting at Prairie View University, Prairie View, March 4-7. Sponsored by the Texas Tuberculosis Association, State Department of Health, State Medical Association, Lone Star State Medical, Dental, and Pharmaceutical Association, Prairie View University, and National Tuberculosis Association, the Texas Assembly has set the pattern for similar groups now meeting annually in fifteen other states, points out Miss Pansy Nichols, executive secretary of the Texas Tuberculosis Association, who has served as secretary of the Assembly since its organization.

The 1946 program included lectures and clinic demonstrations in internal medicine, poliomyelitis, obstetrics, syphilis, and tuberculosis. Out of state speakers included Dr. W. A. Younge, St. Louis; Dr. John Watson Chenault, Tuskegee, Ala.; Dr. Theodore K. Lawless, Chicago; and Dr. W. Roderick Brown, Pittsburgh, Pa. Dr. J. G. Gathings, Dr. Walter F. Morse, and Dr. J. Z. Gaston, all of Houston, and Dr. John Potts, Fort Worth, also participated.

Among the guests of honor at the session on public health, celebrating the tenth anniversary of the Assembly, were Dr. H. F. Connally, Waco, president, State Medical Association; Dr. James A. Greene, Houston, professor of medicine, Baylor University College of Medicine; Judge Weaver H. Baker, Austin, chairman, State Board of Control; and Dr. Cameron St. Clair Guild, New York, director of special programs, National Tuberculosis Association.

Dr. Lawless presented $200 to the physician bringing the most interesting case for study to one of the clinics.

The Texas Medical Center in Houston was formally dedicated at a dinner in the Rice Hotel February 28 at which more than six hundred were present. Deed to the 161 acres of land being donated by the M. D. Anderson Foundation was presented to the officials of the center, and sites ranging from two and one-half to seventeen acres were dedicated to individual projects already approved for inclusion in the center.

Dr. Raymond B. Allen, vice-president of the Chicago Medical Center commission, spoke of the purposes and influences of medical centers. Col. George A. Hill, Jr., outlined the history of the Texas Medical Center to date, and Dr. E. W. Bertner, chairman of the board of trustees for the center, suggested what the center will mean in the future. Presentation of the title to the land was made by Leland Anderson, nephew of the late M. D. Anderson, on behalf of the M. D. Anderson Foundation, to Dr. Bertner, representing the board of trustees of the Texas Medical Center. Trustees of the Anderson Foundation are Col. W. B. Bates, John H. Freeman, and Horace M. Wilkins. Trustees of the Medical Center are Dr. Bertner, Mr. Freeman, Mr. Bates, Mr. Wilkins, Mr. Anderson, James Anderson, Dr. Frederick C. Elliott, Hines H. Baker, H. R. Cullen, Ray L. Dudley, Oveta Culp Hobby, Jesse Jones, and Bishop Clinton S. Quin. Mr. Jones, according to the Houston *Post*, was the only trustee not present for the dedicatory dinner, at which many dignitaries of medicine and education throughout the state were special guests.

Programs for the dinner contained a map of the center showing divisions into plots which have been set aside for various units. The map was also reproduced in larger size to hang behind the speakers' table, at which the trustees and representatives from colleges and other organizations which will participate in the center were seated.

Among the projects already approved for inclusion in the center were named the following: University of Texas units including the M. D. Anderson Hospital for Cancer Research, the school of medicine preceptorial training program, the postgraduate and graduate school of medicine, the school of dentistry, the college of dental nursing, the postgraduate and graduate school of dentistry, the institute of orthodontics, the school of public health, and the institute of geographic medicine; five hospitals, including Hermann, St. Luke's Episcopal, Methodist, Shrine Crippled Children's, and a tuberculosis hospital; Baylor University College of Medicine; University of Houston nursing program; Rice Institute coöperative program in research; and the Houston Academy of Medicine library. Related units nearby will include the United States Naval Hospital, now under construction, and the United States Veterans Administration Hospital.

Prior to the dinner, Dr. Bertner was quoted by the Houston *Chronicle* as announcing that $32,000,000 has already been allocated for fifteen buildings in the Medical Center and a housing unit and community center, but that ultimately the center may contain fifty buildings in addition to twenty-two housing units, a community center, and nonsectarian chapel. Already under construction is the building for Baylor University College of Medicine, which should be completed by December, 1946. Next project to get under construction will probably be the new Hermann Hospital, which will be about twice the size of the present hospital and will have about 400 beds.

All participants in the center are allocated ground for construction of buildings to be erected at their own expense. They must agree, according to the by-laws of the center, to use a certain percentage of their hospital beds for research work. In addition, participants may not make a profit from the enterprise. Instead, all profits must be turned back into the center for expansion either of the individual unit or for other sections of the center.

Dr. Bertner said that present plans called for completion of the original $32,000,000 worth of con-

struction within five years, but that the center "will never be completed . . . until we have the finest such institution in the world."

An additional gift from the M. D. Anderson Foundation to the Texas Medical Center through the University of Texas was announced at the Houston Texas Exes banquet March 2, according to the Houston *Chronicle*. Col. George A. Hill, Jr., chairman of the Development Board of the University, announced that the foundation had contributed $1,500,000 to the University's Texas Medical Center program on a matching basis: one dollar from the foundation for each dollar contributed by others. The foundation had previously donated $500,000 each toward the erection of permanent buildings for the M. D. Anderson Hospital for Cancer Research and for the University's dental unit. A committee of approximately one hundred Houstonites, with Dr. E. W. Bertner as honorary chairman, D. A. Simmons as chairman, and Palmer Bradley as executive vice-president, has been organized to work toward raising the $3,750,000 necessary to match the latest contribution of the Anderson Foundation and to make up the total $6,250,000 needed to establish the proposed units of the University at the Texas Medical Center, the Houston *Press* reports.

Baylor University College of Medicine held commencement exercises in Houston on March 25 for forty-nine graduates, the college reports. Of these, fourteen received commissions in the Army, twenty-five in the Navy. Dr. Maxwell Edward Lapham, dean of Tulane University School of Medicine, gave the commencement address.

Southwestern Medical College.—The First Texas Chemical Manufacturing Company, Dallas, has awarded a special grant to the Southwestern Medical Foundation to publish the talks of the 1946 health lecture series in booklet form, Fred M. Lange, vice-president and managing director of the foundation, has announced. The current lecture series of six Sunday afternoon talks is being sponsored by Parkland Hospital and Southwestern Medical Foundation, according to the Oak Cliff *Tribune*. The grant from the chemical firm will make possible a wide distribution of the health talks, which will be given free of charge to those who request a copy from the Southwestern Medical College.

A collection of medical books bought new throughout a period of almost a hundred years for a private library are now in the library of Southwestern Medical College, according to the Palestine *Press*. The books, called one of the best collections of medical books they had ever seen by recipients of the collection, were gathered by the late Drs. E. W. and H. R. Link and their father, Dr. H. H. Link, all of Palestine. The estate of the two brothers, who died in recent years, donated their library to the medical college some months ago.

Dr. Jabez Galt and Dr. Arthur Grollman, both of the Southwestern Medical College faculty, attended the second Mexican Congress of Cancer in Guadalajara, Mexico, February 3-9, reports the Mount Vernon *Optic-Herald*. Both doctors read papers in Spanish before the congress.

Dr. Arthur Grollman delivered the first of a series of lectures on developments in medical science under sponsorship of Parkland Hospital and Southwestern Medical Foundation February 24 at the Civic Federation's Scott Hall, informs the Dallas *News*. Dr. Grollman's subject was glands of internal secretion.

University of Texas School of Medicine.—The University of Texas School of Medicine has been approved by the Veterans Administration district office at Waco for both educational and on-the-job training programs under the G. I. bill of rights, according to the Galveston *Tribune*. Under the educational program will be available training leading to the degree of doctor of medicine, postgraduate and resident training in medicine, undergraduate and postgraduate training in nursing, physical therapy training, training as radiology technicians and as medical technologists. On-the-job programs will be in the fields of physical plant maintenance and management, business administration as it pertains to medical school activities, hospital administration, and other activities relating to hospital operation, and hospital dietetics.

Formal reopening of the Galveston State Psychopathic Hospital as a part of the University of Texas School of Medicine was held March 7 in conjunction with the meeting of the Texas Society for Mental Hygiene in Galveston March 7-8, states the Galveston *Tribune*. Col. F. G. Ebaugh, recently consulting psychiatrist of the Eighth Service Command and now professor of psychiatry at the University of Colorado Medical School, gave an address. Judge Weaver Baker, chairman of the State Board of Control, outlined the relations of the hospital to the state institutions and to the University of Texas Medical Branch.

Seventy-eight students received their degrees in medicine, forty-five were granted Army commissions, and nineteen Navy commissions at the fifty-sixth commencement exercises of the University of Texas School of Medicine on the municipal pier in Galveston March 2, states the Galveston *News*. The exercises were held jointly with those of the John Sealy College of Nursing, from which twenty-four were graduated. Dr. A. M. Schwitalla, dean of the St. Louis University School of Medicine, gave the commencement address, and Dr. T. S. Painter, acting president of the University, presented the diplomas. Capt. J. E. Cooper, commanding officer of the Naval V-12 unit at the Medical Branch, presented the School of Medicine with a naval citation for its services. Baccalaureate services were held the preceding Sunday morning at the First Presbyterian Church, with Dr. Wil R. Johnson, pastor of the host church, in the pulpit.

A grant of $5,000 has been given by the C. R. Roerig Company, Chicago, to support the research of Dr. C. M. Pomerat, director of the Tissue Culture Laboratory at the University of Texas School of Medicine.

"ACS," the anti-reticular cytotoxic serum which Russian scientists claim to have perfected to the point where it slows the advance of old age, has been under investigation at the University of Texas School of Medicine for the past two years, Dr. Chauncey D. Leake, vice-president and dean, has announced. The Galveston *Tribune* reports that the study was first undertaken early in 1944 by Dr. C. M. Pomerat, professor of anatomy, and Dr. Ludwik Anigstein, associate professor of preventive medicine, following the original reports from Russia in 1941 and subsequently. Additional research has been carried on by Dr. E. H. Frieden, research associate in the Department of Dermatology; Dr. George Emerson, professor of pharmacology; Dr. Paul Ewing, associate professor of pharmacology; and Dr. Thurlo Thomas, assistant professor of anatomy. Observations of the medical school scientists indicate the possible importance of the serum in affecting the reticulo-endothelial system, but in their opinion do not as yet warrant a clinical trial.

Personals

Col. Earl Standlee, M. C., A. U. S., formerly of Dallas, is returning to that city as surgeon for the Eighth Service Command, according to the Santa Anna *News*. He recently returned from three and one-half years overseas.

Dr. A. I. Folsom, Dallas, president-elect of the American Urological Association, addressed the annual convention of the Southeastern Section of that association in Augusta, Ga., March 22, using as his

subject "Transverse Abdominal Incision for the Removal of Large Tumors of the Kidney," states the Dallas *Times-Herald.*

Dr. R. S. Lloyd, director of the City-County Health Unit at Corpus Christi for more than two years, resigned, effective March 20, informs the Corpus Christi *Chronicle.* He will be head of the Venereal Disease Control division of the State Health Department in Austin.

Dr. Fred A. Bloom, Dr. Frank O. McGeehee, Dr. John M. Trible, and *Dr. Duncan C. McKeever,* all of Houston, are assisting Houston Elks in a drive to obtain $25,000 for establishment of a crippled children's clinic in Houston and furtherance of the Texas Elks Crippled Children's hospital at Ottine, according to the Houston *Post.*

Dr. O. M. Marchman, Dallas, has been awarded a bronze plaque by the Medical Service Society of Dallas, an organization of representatives of pharmaceutical firms, for his coöperation and service. The award was made at the annual presidents' banquet of the society in January, informs the Dallas *Medical Journal.*

Dr. Warren Andrew, associate professor of histology and embryology at Southwestern Medical College, was presented the 1945 distinguished service award of the Dallas Junior Chamber of Commerce at its annual banquet and dance February 1. The award was for Dr. Andrew's research in the cellular change brought on by old age, according to the Park Cities *News.*

Dr. Minnie L. Maffett, Dallas, who served as national president of the Federated Business and Professional Women's Clubs for five years, served as chief consultant at the midwinter board meeting and leadership conference of the Texas division in Austin February 16 and 17, reports the Austin *Statesman.*

Dr. William Thomas has been transferred to the staff of the State Confederate Home in Austin from the medical staff of the Terrell State Hospital, states the Terrell *Tribune.*

Dr. E. H. Cary, president of the board of trustees of Southwestern Medical Foundation, has been acclaimed as the outstanding citizen of Dallas during 1945 by being awarded the Linz Award, granted annually to the Dallasite selected by a committee of judges as having rendered the greatest service to the community during the past year. The Dallas *Times Herald,* which sponsors the award, reports that Dr. Cary was chosen for his work as founder and guiding genius of the great medical center from more than fifty nominations.

Dr. Earl Smith has resigned his position as director of the Texarkana-Bowie County Health Unit and has left for residence in Tarzana, Calif., according to the Texarkana *Gazette.*

Dr. H. H. Key, of Orange, has been made director of the Orange City-County Health Unit, succeeding *Dr. R. W. Williams,* who was transferred to another post, states the Orange *Leader.*

Dr. Harry S. Rubin, who was chief of the veterans hospital in Waco when it opened in 1932, is returning there after spending some three months as deputy administrator in charge of a three-state administration office in Dallas, according to the Waco *Times Herald.* Dr. Rubin is being returned to Waco because of a shortage of doctors; a nonmedical regular Army man will take over the Dallas office.

Dr. J. M. Woodall was reëlected president of the Howard County Tuberculosis Association at a meeting in Big Spring in February, states the Big Spring *Herald. Dr. R. B. G. Cowper* was named to the board of directors for a one-year term and *Dr. Edward Strauss* for a two-year term.

Dr. L. D. Borough, formerly of Fort Worth, is at present a resident in the New York Neurological Institute, having been separated from the Army as a lieutenant colonel last November. Dr. Borough will resume practice in Fort Worth upon the completion of his residency in July.

Dr. Fred K. Laurentz, one time head of the Galveston County Health Unit and recently released from active Army service, has been appointed assistant city health director of Houston, according to the Houston *Press.* His appointment filled a five-year vacancy created when Dr. Austin E. Hill was stepped up from assistant city health director to the directorship.

Dr. Duan E. Packard has been appointed health officer for Kerr County to fill the vacancy caused by the death of Dr. John D. Jackson, states the Kerrville *Times.* Dr. Packard recently returned to practice in Kerrville after serving four years with the Army Medical Corps.

Dr. Lawrence L. Spitzer, for the last four years an Army flight surgeon, has been appointed to the staff of the El Paso City-County Health Unit, being assigned to the maternity and child health division, states the El Paso *Times.*

Dr. D. Lyle Robertson has been named director of the Wichita Falls Health Unit, according to the Wichita Falls *Record-News.* Dr. Robertson, a member of the Wichita Falls city health staff before entering the Army, was to take up his new duties immediately upon discharge from service the middle of February. He succeeds *Dr. W. P. Scarlett,* who left last August to become city health director at Little Rock, Ark.

Dr. C. M. Cash, San Benito, has been honored by having the yearbook of the Valley Baptist Hospital in Harlingen dedicated to him, informs the Harlingen Valley *Star.* The annuals, which were delivered to the staff early in March, dedicate two pages to the late *Dr. George D. Beech,* Rio Hondo, and the late *Dr. E. T. Morris,* San Benito.

Marriages

Dr. J. J. Whitsitt married Mrs. Dott Causey Strong in Houston, January 23, 1946.

Dr. Allen H. Neighbors, Jr., married Miss Peggy Overton in Cleveland, February 2, 1946. Dr. Neighbors is stationed at Camp Wallace and the couple are living in Galveston.

Dr. Carroll T. Adriance married Miss Gloria Kierbow in Galveston February 25, 1946.

Dr. J. E. Adams married Miss Sarah Ellesor, New Waverly, in Houston in February. They are residing in Kilgore where Dr. Adams is president of the board of directors of the Kilgore Memorial Hospital.

SOCIETY NEWS

Anderson-Houston-Leon Counties Society

(Reported by John L. Dean, Jr., Secretary)

Anderson-Houston-Leon Counties Medical Society has announced the following officers for 1946: Ripley H. Hunter, Palestine, president; A. D. Wages, Palestine, vice-president; John L. Dean, Jr., Crockett, secretary-treasurer; F. E. Felder, Palestine, delegate; R. H. Bell, Palestine, alternate; R. Q. Hunter, J. T. Humphries, and Claud D. Joyce, Jr., all of Palestine, committee on legislation and public relations.

Armstrong-Donley-Childress-Collingsworth-Hall Counties Society

February 22, 1946

(Reported by Perry R. Jeter, Secretary)

Diagnosis and Treatment of Common Heart Diseases—William R. Klingensmith, Amarillo.
Some Common Pediatric Problems—George M. Cultra, Amarillo.

Armstrong-Donley-Childress - Collingsworth - Hall Counties Medical Society met at Memphis on February 22.

William R. Klingensmith and George M. Cultra, both of Amarillo, were guests of the Society, speaking on the subjects named above.

The Society also discussed again the problem of placing returning doctors and agreed that there was little to be done in the area. The only place a physician had been needed was at Clarendon, and Dr. B. L. Jenkins of that city said that a doctor was locating there. Also under discussion was the problem of political candidates from the area.

March 15, 1946

(Reported by Perry R. Jeter, Secretary)

Acute Cardiovascular Emergencies—H. H. Latson, Amarillo.
Lung Abscess with Case Report—J. B. White, Amarillo.

Armstrong-Donley-Childress - Collingsworth - Hall Counties Medical Society met March 15 with eight members and one visitor present. The above scientific program was carried out.

Physicians from the different counties were requested to report on the needs for physicians and hospitals in each county in accordance with a survey requested by the President of the State Medical Association.

Atascosa County Society

(Reported by U. B. Ogden, Secretary)

Atascosa County Medical Society has elected officers for the current year as follows: W. H. Joyce, Lytle, president; U. B. Ogden, Pleasanton, secretary-treasurer; and F. R. Ware, Poteet, delegate.

Bexar County Society

February 28, 1946

Bexar County Medical Society, meeting February 28, authorized its president, V. C. Tucker, to work on a Chamber of Commerce committee for study and development of a medical foundation for San Antonio. Directors of the Chamber of Commerce in support of a resolution presented by its health committee, calling for establishment of such a foundation as the first step toward formation of a medical center, agreed to appoint a committee to work on the problem and invited the support of the medical society. The committee, which will be widely representative of both business and professional men, will be expected to recommend a chartered foundation, possibly with a chairman and a board of directors, which will serve as a medium through which donations to the medical center movement may be received.

The society also voted to name a five-man committee within its membership to study the general problem of hospitalization and assist in matters of policy. Drs. Herbert Hill, Ferdinand P. Herff, E. F. Lyon, Jr., P. I. Nixon, and J. Manning Venable will serve on this committee.

Bowie County Society

February 15, 1946

Bowie-Miller Counties Medical Societies in joint meeting at the Hotel McCartney, Texarkana, February 15, approved a set of regulations concerning sanitation, communicable disease, and general health education in the schools of the community. Twenty-one were present.

The recommendations included a survey of school sanitation and environmental factors and of emergency facilities; development of a program for detection of faulty vision, impaired hearing, or dental caries among school children; periodic health examinations of teachers; routine examinations of food handlers in the schools; adoption of a referral system in cases of suspected communicable disease; requirement of a certificate of freedom from disease of all children who have been absent with a communicable disease; required immunization against the most locally prevalent communicable diseases; education toward general sanitation knowledge and communicable disease knowledge; and field trips to water plants and other appropriate plants.

Brazoria County Medical Society

February 28, 1946

(Reported by A. O. McCary, Secretary)

Padgett-Hood Dermatome and Its Practical Use in Skin Graft—Ralph E. Gray, Freeport.

Brazoria County Medical Society met at the Dow Hotel in Freeport on February 28. The above scientific program was carried out with Dr. Gray, of the Dow Magnesium Hospital, using a patient for demonstration.

The society voted to work actively against the socialization of medicine.

The following committee on hospital and medical service was appointed by President W. M. Greenwood, West Columbia: George D. Reeves, Freeport, chairman; William C. Holt, Angleton; S. B. Slaughter, Velasco; J. G. Hayes, Alvin; Robert G. Miller, Lake Jackson; and W. M. Greenwood.

Brazos-Robertson Counties Society

February 26, 1946

Sister Kenney's Treatment of Polio—Herbert Hipps, Waco.

Brazos-Robertson Counties Medical Society met in the city hall at Hearne February 26 to hear Herbert Hipps, Waco, speak on the Kenney method of treating poliomyelitis. Ten members were present.

Brooks-Duval-Jim Wells Counties Society

March 13, 1946

(Reported by P. S. Joseph, Secretary)

Brooks-Duval-Jim Wells Counties Medical Society met March 13 in Alice, electing the following officers: J. A. Moet, Orange Grove, president; C. L. Behrns, Alice, vice-president; and P. S. Joseph, Alice, secretary-treasurer. The society decided to meet on the second Wednesday of each month.

Brown-Comanche-Mills-San Saba Counties Society

March 11, 1946

Indications of Pneumothorax—David McCullough, Kerrville.
Indications and Results of Pulmonary Reception—Robert Shaw, Dallas.
Thoracoplasty—John S. Chapman, Dallas.

Brown-Comanche-Mills-San Saba Counties Medical Society met for dinner and a scientific program at Hotel Brownwood in Brownwood, March 11. Three guest speakers, as noted above, presented the program, illustrating their talks with roentgenograms.

Dawson-Lynn-Terry-Gaines-Yoakum Counties Society

(Reported by A. H. Daniell, Secretary)

Dawson - Lynn - Terry - Gaines - Yoakum Counties Medical Society will be served during the current year by S. Z. Frazier, Lamesa, as president, and A. H. Daniell, Brownfield, as secretary-treasurer.

Denton County Society

March 7, 1946

Fractures and Injuries of the Back—P. M. Girard, Dallas.

Denton County Medical Society met March 7, in the hospital of Texas State College for Women, Denton, with Bobbye Short, college physician as hostess. William Magness, president, presided.

P. M. Girard, Dallas, orthopedic surgeon, spoke on fractures and injuries of the back.

Ector-Midland-Martin-Howard-Andrews-Glasscock Counties Society

February 21, 1946

(Reported by E. H. Strauss, Secretary)

The Nose As Concerns the General Practitioner—James H. Chapple, Midland.

Ector-Midland-Martin-Howard-Andrews-Glasscock Counties Medical Society and Auxiliary met at the

Scharbauer Hotel in Midland on February 21 for a steak dinner. The physicians remained for a business and scientific program.

J. M. Woodall, Big Spring, the new president, presided. Other new officers are M. Dickinson, Midland, vice-president; E. H. Strauss, Big Spring, secretary-treasurer; W. G. Whitehouse, Midland, censor; C. E. Thomas, Jr., alternate delegate; R. B. G. Cowper (Big Spring) (chairman), E. V. Headlee (Odessa), and James H. Chapple (Midland), committee on public relations.

A letter from Jeff L. Reese, State Medical Association's director of public relations, giving information regarding the legislative records of representatives and senators of the district on medical and public health legislation was read. It was agreed to assess each member an additional $5 to provide a fund for securing guest speakers and for other expenses.

James H. Chapple, Midland, spoke on the subject noted above.

Erath-Hood-Somervell Counties Society

(Reported by Vance Terrell, Secretary)

Erath-Hood-Somervell Counties Medical Society has elected the following officers for 1946: A. O. Cragwall, Stephenville, president; Vance Terrell, Stephenville, secretary-treasurer; T. F. Bryan, Dublin, delegate; and J. C. Terrell, Stephenville, alternate.

Galveston County Society

February 8, 1946

(Reported by John McGivney, Secretary)

Symposium on Pneumonia.
Diagnosis—C. T. Stone.
Pneumonia in Infants and Children—Boyd Reading.
Lahoratory Diagnosis—William Marr.
X-Ray Diagnosis—William Wallace.
Treatment—Raymond Gregory.
Surgical Complications—R. M. Moore.

Galveston County Medical Society met February 8 with the president, Francis Garbade, presiding. He reminded members that scientific papers must be read before the county society before they can be presented at the annual session of the State Medical Association. He announced that chairmen of recently appointed committees would soon receive a letter and copies of the by-laws of the State Medical Association to explain the functions of their respective committees. In the absence of Dick Wall, chairman of the general arrangements committee for the state meeting, Dr. Garbade made a brief report for that committee.

A letter from Dr. Holman Taylor, secretary of the State Medical Association, commending the effort of the society to improve its activities was read. A letter from Tom Darlington, business manager of *Medical Records and Annals*, expressing appreciation for receiving the minutes of the previous meeting was also read.

C. T. Stone announced a postgraduate course in internal medicine to be held at the University of Texas School of Medicine under sponsorship of the American College of Physicians March 25.

Application for membership of Andrew Magliolo was approved.

The above scientific program was presented.

Gregg County Society

March 1, 1946

Medicine Marches Forward—Oscar M. Marchman, Sr., Dallas.

Gregg County Medical Society members were guests at a banquet given by Delta Tau Nu, premedical society of Kilgore Junior College, at the Longview Community Center on March 1. Oscar M. Marchman, Sr., professor of otolaryngology at Southwestern Medical College, Dallas, was the speaker.

John L. Cole was master of ceremonies and gave the address of welcome. Roscoe Northcutt, Jr., delivered the invocation, and piano numbers were played by Boggs Ryan, student at Southern Methodist University.

Hardeman-Cottle-Foard-Motley Counties Society

(Reported by J. F. Hughes, Secretary)

Hardeman-Cottle-Foard-Motley Counties Medical Society has elected the following officers: E. A. Vestol, Quanah, president; T. D. Frizzell, Quanah, vice-president; J. F. Hughes, Spur, secretary-treasurer; A. C. Traweek, Sr., Matador, delegate; T. D. Frizzell and Hines Clark, Crowell, alternates; Hines Clark, R. R. McDaniel (Quanah), and C. C. Pate (Paducah), committee on military affairs and civilian defense; A. C. Traweek, Jr. (Matador), J. S. Stanley (Matador), and J. M. George (Quanah), committee on legislation and public relations.

Hays-Blanco Counties Society

(Reported by J. R. DeSteiguer, Secretary)

Hays-Blanco Counties Medical Society will be served by York Lancaster, San Marcos, as chairman of the legislative committee, replacing Dr. L. L. Edwards, recently deceased.

Hopkins-Franklin Counties Society

February 12, 1946

(Reported by Thomas H. Stevens, Secretary)

Hopkins-Franklin Counties Medical Society met February 12, electing the following officers for the year: Thomas H. McConnell, Sulphur Springs, president; S. Byrd Longino, Sulphur Springs, vice-president; Thomas H. Stevens, Sulphur Springs, secretary-treasurer; J. M. Fleming, Mt. Vernon, delegate; and H. E. Chandler, Mt. Vernon, alternate. The members expressed a desire for more frequent meetings and for diagnostic clinics.

Hunt-Rockwall-Rains Counties Society

February 12, 1946

(Reported by Harriet Rogers, Secretary)

Varicose Veins—J. R. Peyton, Dallas.
Skin Troubles and Treatment—J. S. Cooper, Greenville.

Hunt-Rockwall-Rains Counties Medical Society met in Greenville February 12 with S. D. Whitten, president, presiding. Fifteen members and guests were present.

Consideration was given to changing the name of the society to Hunt County Medical Society as physicians in Rockwall and Rains Counties are not active in the society.

W. P. Philips and Joe Becton, both of Greenville, members of the legislative committee, made a report. The society voted to endorse a basic science law for Texas and a resolution to that effect was passed and forwarded to the State Medical Association.

J. R. Peyton, Dallas, presented the symptoms, diagnosis, prognosis, and treatment of varicose veins. His paper was discussed by Lowell H. Leberman, Commerce, and W. P. Philips, Greenville.

J. S. Cooper discussed heat rashes, leukoplakias, dermatoses, and superficial malignancies.

Leslie Bush was welcomed to the society by transfer from Tom Green Eight County Society.

Jasper-Newton Counties Society

February 20, 1946

(Reported by G. Mason Graham, Secretary)

Jasper-Newton Counties Medical Society met at the Pep Hotel in Jasper February 20 with President J. N. Seale, Jasper, presiding.

The legislative and public relations committees reported on legislation recommended by President Harry Truman and Surgeon General Thomas Parran

and on other current medical legislative problems. It was moved by W. R. Worthy, Call, seconded by E. S. Freeman, Jasper, that the society approve passage of a basic science bill, copy of a resolution to that effect to be sent to Holman Taylor, secretary of the State Medical Association, and to A. E. Sweatland, councilor of the Tenth District.

The secretary was instructed to extend regrets to W. R. Kelly upon his illness.

Jefferson County Society

January 11, 1946

(Reported by L. R. Byrd, Jr., Secretary)

Jefferson County Medical Society met in called session January 11 at Hotel Dieu, Beaumont, to hear and discuss with R. B. Anderson, Fort Worth, chairman of the public relations committee of the State Medical Association, problems concerned with legislation and the public relations program of the State Association.

Dr. Anderson discussed cult legislation as it had been presented in the State Legislature previously, indicating the stand which had been taken by representatives from the district. He then discussed the principles of a basic science law for Texas, which would set up qualifications for all those desiring to practice the healing arts. He concluded by outlining the public relations program of the State Medical Association,

A motion by Hyman J. Kaplan to consider the present meeting as the regular January meeting of the society was passed. Business which would otherwise have been considered at the regular meeting July 14 was then discussed. Upon motion by Charles H. Todd, Jr., Beaumont, the society voted to pay the expenses of L. C. Powell, Beaumont, incurred in attending a State Medical Association meeting. Norman Duren, Beaumont, formerly of the Galveston County Society, and Louian C. Carter, Port Arthur, formerly of the Falls County Society, were accepted for membership by transfer.

The following committees were announced by President George Sladczyk: *economics*, W. D. Smith (Beaumont) (chairman), Tom Matlock (Port Arthur) (co-chairman), H. E. Alexander, Clifford Painton; *program*, W. Price Killingsworth (Port Arthur) (chairman), Seab J. Lewis (Beaumont) (co-chairman), Joe Stoltje, P. J. Beyt; *legislative and public health*, L. C. Heare (Port Arthur) (chairman), L. C. Powell (Beaumont) (co-chairman), R. R. Orrill, Talbot A. Tumbleson, Stuart A. Wier; *hospital*, John Hart (Beaumont) (chairman), B. H. Vaughan (Port Arthur) (co-chairman), Grady Bevil; *preventive medicine*, J. V. Crager (Beaumont) (chairman), Paul Meyer (Port Arthur) (co-chairman), H. B. Williford, W. D. Brown, W. A. Newton, J. M. White, B. W. Wood; *industrial medicine and hygiene*, James W. Long (Port Arthur) (chairman), Dudley English (Beaumont) (co-chairman), B. F. Pace, Russell C. Willoughby, John N. Gardner, E. C. McRee; *tuberculosis*, M. A. Cunningham (Beaumont) (chairman), Fred Y. Kuhlman, C. M. White, L. H. Ledbetter, I. M. McFaddin, J. D. Martin, J. W. Torbett; *cancer*, C. H. Todd (Beaumont) (chairman), Max J. Knight (Port Arthur) (co-chairman), J. M. Raines; *heart disease*, M. E. Suehs (Beaumont) (chairman), B. B. Elster (Port Arthur) (co-chairman), L. T. Pruitt, Louin Carter, Seab J. Lewis; *public relations*, T. A. Fears (Beaumont) (chairman), A. R. Autrey (Port Arthur) (co-chairman), E. D. Mills, W. E. McRee, C. L. Pentecost.

February 11, 1946

(Reported by L. R. Byrd, Jr., Secretary)

Jefferson County Medical Society met at St. Mary's Hospital, Port Arthur, on February 11. President George Sladczyk presided.

A copy of a sample resolution on cult legislation and a basic science law was read to the society. Following discussion, the resolution was referred to the legislative committee.

President Sladczyk presented an outline of aims and policies for the society for 1946, pointing out that organized medicine has not presented a substitute program for government medicine and has not informed the public as to what is done with respect to community health, and that committees for the society had been appointed and their duties designated with the above considerations in mind. He also read the duties of each committee. L. C. Powell, Beaumont, moved, seconded by J. M. White, Port Arthur, that the aims and policies and the duties of committees as presented by President Sladczyk and amended by T. A. Fears, Beaumont, be approved. The motion carried.

Dr. Fears' amendment was that a venereal disease control committee be appointed. In accordance with the motion, Dr. Sladczyk appointed Dr. Fears (chairman), B. W. Wood (Port Arthur) (co-chairman), W. A. Smith, and B. J. Fett to such a committee.

Dr. Fears moved that the by-laws of the society be amended so that there would be two meetings each month except June, July, and August. Dr. Powell seconded the motion, which was tabled until the March meeting.

Dr. Wood moved, seconded by L. C. Heare, Port Arthur, that a press release regarding the program adopted by the society be prepared by the public relations committee. The motion carried.

Emmett L. Allamon, Ross J. Stroble, Kit W. Rowe, and Harold H. Bevil were elected to membership upon application.

February 26, 1946

(Reported by L. R. Byrd, Jr., Secretary)

Clinical-Pathological Conference—Seab J. Lewis, Beaumont.

Jefferson County Medical Society had a called meeting February 26, 1946, at St. Therese Hospital, Beaumont. Following the above scientific program, Rufus K. Simpson, Beaumont, was accepted for membership on transfer from a Mississippi county society. Discussion of a home for physicians under the direction and maintenance of the State Medical Association was presented by H. E. Alexander, Beaumont. The matter was referred to the committee on economics for study and recommendation.

J. C. Crager, Beaumont, chairman of the preventive medicine committee, read the following recommendations from his committee: that publicity be given throughout the county regarding the availability of various immunizations and the desirability of their widespread use by the public, that school boards of the county be requested to make diphtheria immunizations prerequisite to admission of children, and that efforts be made to secure employment of a qualified sanitary engineer by the county. The recommendations were unanimously adopted.

W. P. Killingsworth, Port Arthur, chairman of the program committee, requested that members of the society report to him what papers they can present throughout the year. M. A. Cunningham, Beaumont, chairman of the tuberculosis committee, discussed the tuberculosis situation in the county and Dr. Lewis expressed his opinion that a countywide x-ray survey directed toward discovering cases of tuberculosis should not be made on a free basis but should instead be promoted by publicity aimed at encouraging persons to check on themselves with their own physicians. John A. Hart, Beaumont, chairman of the hospital committee and a member of the State Board of Health, pointed out that complaints

regarding State Health Department activities referring to tuberculosis and other matters should be made to the State Board of Health instead of to the State Health Officer for expeditious handling.

March 11, 1946

(Reported by L. R. Byrd, Jr., Secretary)

Clinical Uses of Penicillin, with Particular Reference to Oral and Aerosol Penicillin—Louian C. Carter, Port Arthur.

Jefferson County Medical Society met at St. Mary's Hospital, Port Arthur, on March 11 with George Sladczyk, president, presiding.

Louian C. Carter, Port Arthur, presented the paper named above, which was discussed by L. C. Heare and W. P. Killingsworth, of Port Arthur; M. F. Raine, C. L. Pentecost, W. A. Smith, T. A. Fears, and John A Hart, of Beaumont.

Dr. Fears reported that the Veterans Administration expects to set up a committee of four doctors on a full-time basis in Beaumont to serve for the general area in a directive and referral capacity with respect to the care of veterans with service connected disabilities. Each of these positions will pay $6,000. Dr. Fears indicated that anyone interested should communicate with the Veterans Administration office in Houston.

Dr. Hart reported that two candidates for public office had stated their approval of organized medicine as against all forms of socialized medicine.

Dr. Hart presented for discussion the question of listing physicians in various specialties for the survey of physicians and hospital facilities requested by the State Association. The society agreed that the committee should decide on the listing of physicians. Dr. Hart gave a tentative report of the Beaumont-Port Arthur hospital survey.

Dr. Fears, chairman of the venereal disease committee, pointed out that his investigation of venereal disease surveys made in San Antonio, New Orleans, and other large cities indicated that such surveys and educational programs were carried out only when the county medical society in each area sponsored such a program. He proposed that the Jefferson County Society endorse and lend its support to a venereal disease educational program and that its membership work in coöperation with the U. S. Public Health Service, State Health Department, American Social Hygiene Association, and Federal Security Agency in carrying out the program. His proposal was discussed by W. D. Brown (Beaumont), Stuart T. Wier (Beaumont), and Drs. Hart and Fears and was to be acted upon at the next meeting.

M. A. Cunningham, Beaumont, chairman of the tuberculosis committee, made the following recommendations on behalf of the committee: that roentgen examinations be made routinely of school children within certain categories, school teachers, food handlers, and pregnant women; and that Jefferson County delegates to the State Medical Association House of Delegates be instructed to contact the State Tuberculosis Committee with reference to legislation for the installation of more hospital beds, more public health nurses, and use of the State Tuberculosis Committee as an advisory group to the State Board of Control in matters of tuberculosis control. After discussion, Dr. Heare moved, seconded by J. Y. Harper, Port Arthur, that the recommendation of the tuberculosis committee be accepted. The motion carried.

Dr. Heare, chairman of the legislative committee, presented a resolution favoring passage of a basic science law in Texas. Upon motion by Dr. Pentecost and second by T. W. Martin, Port Arthur, the resolution was adopted.

President Sladczyk reported that Talbot A. Tumbleson would not be in practice in Beaumont and would therefore have to be replaced as delegate. Dr. Wier moved, seconded by Dr. Cunningham, that L. C. Powell, Beaumont, the alternate, be declared the delegate. The motion carried. J. C. Crager, Beaumont, was elected alternate upon motion by Dr. Hart.

Dr. Heare and Dr. Powell reported that they had been requested by the State Medical Association to represent their congressional district at a meeting in Fort Worth to plan activities of the Public Relations Committee of the State Association in the coming political campaign. Dr. Brown, seconded by Dr. Harper, moved that Drs. Heare and Powell be asked by the society to represent it at the Fort Worth meeting and that their expenses by paid by the society. The motion carried.

W. A. Smith opened a discussion of the Eagle Lodge desire to contract with a doctor to take care of minor illnesses in their member group. The question was referred by President Sladczyk to the economic committee.

Theo C. Mitchell, Beaumont, was elected to membership on application.

The motion presented at the previous meeting, by which the society would hold two meetings each month except June, July, and August, was permanently tabled upon motion by Dr. Crager, seconded by Charles H. Todd, Jr., Beaumont.

Kerr-Kendall-Gillespie-Bandera Counties Society

February 18, 1946

(Reported by Lorence Feller, President)

Kerr-Kendall-Gillespie-Bandera Counties Medical Society met for a business session February 18. New officers were elected as follows: W. E. Gregg, Kerrville, president; J. E. Wiedeman, Junction, vice-president; D. E. Packard, Kerrville, secretary-treasurer; D. R. Knapp, Kerrville, delegate; and J. H. Perry, Fredericksburg, alternate.

The Society proposed to dedicate a memorial fund to the late Dr. John Dee Jackson, for many years secretary of the Society, to be presented to the State Library Fund. It was also decided to hold a scientific meeting the second Monday in April.

Kimble-Mason-Menard-McCulloch Counties Society

(Reported by G. H. Ricks, Secretary)

Kimble-Mason-Menard-McCulloch Counties Medical Society has elected the following new officers: Floyd McCollum, Mason, president; A. W. Hinchman, Brady, vice-president; J. P. Anderson, Brady, secretary-treasurer; D. W. Jordan, Brady, delegate; Floyd McCollum, alternate.

Lampasas-Burnet-Llano Counties Society

(Reported by Joe A. Shepperd, Secretary)

Lampasas-Burnet-Llano Counties Medical Society has announced the following 1946 officers: George L. Gray, Llano, president; Thomas D. Vaughn, Bertram, vice-president; Joe A. Shepperd, Burnet, secretary-treasurer; R. L. Shepperd, Llano, delegate; and W. M. Brook, Lampasas, alternate.

Lubbock-Crosby Counties Society

January 3, 1946

(Reported by M. H. Benson, Secretary)

Thrombo-Angiitis Obliterans—R. H. McCarty, Lubbock.

Lubbock-Crosby Counties Medical Society met January 3 at the Hotel Lubbock in Lubbock with sixteen present.

A letter from R. B. Anderson, Fort Worth, chairman of the public relations committee of the State Medical Association, with regard to the adoption of a resolution by the society urging passage of a basic science law by the State Legislature, was read. Upon motion by J. T. Hutchinson, seconded by F. B. Malone such a resolution was adopted.

Allen T. Stewart moved that local dues be increased to $5. The motion was seconded by M. M.

Ewing and passed. The financial report of the past secretary-treasurer was approved.

J. W. Rollo, Lubbock city health officer, introduced the problem of chest roentgen examinations to be included in the city health certificate. In a general discussion Christopher Mansell suggested that the city buy its own x-ray equipment, pointing out that this procedure would probably be less expensive to the city and to the applicant. Upon motion of Dr. Ewing, a committee was appointed to investigate the problem and report at the next meeting. President A. G. Barsh appointed Drs. Mansell, Rollo, Ben Hutchinson, and Ewing.

Beatrice Knight was elected to membership upon application.

R. H. McCarty defined the condition of thromboangiitis obliterans, noted the etiological factors involved, the pathologic symptoms, and discussed the following treatment: warm clothing, avoidance of exposure, diathermy, exercises, warm sitz baths, large fluid intake with sodium chloride, typhoid vaccine, vasodilator drugs, bilateral sympathetic ganglionectomy, and amputation.

McLennan County Society

February 12, 1946

Different Phases of Leprosy as Seen in the Tropics—Paul H. Power.

McLennan County Medical Society met jointly with the Hillcrest Hospital medical staff in the medical library of the hospital February 12. Following dinner Paul H. Power spoke on leprosy.

Panola County Society

(Reported by Lynn C. Hooker, Secretary)

Panola County Medical Society officers for 1946 are as follows: Charles F. Hull, president; Charles D. Baker, vice-president and secretary-treasurer; Charles D. Baker, delegate; and S. L. Boren, alternate, all of Carthage. Lynn C. Hooker, Carthage, who was elected secretary-treasurer, was forced to resign because of ill health.

Pecos-Jeff Davis-Presidio-Brewster Counties Society

February 12, 1946

(Reported by Joel Wright, Secretary)

Pecos - Jeff Davis - Presidio - Brewster Counties Medical Society met at Alpine February 12 for a general discussion of prepayment health service and socialized medicine. The Society unanimously approved the effort being made by the State Medical Association of Texas and the American Medical Association to inform the public of the dangers involved in the proposals of the Pepper and Wagner-Murray-Dingell bills, now pending in Congress.

An election of officers for the current year resulted in the following: W. E. Lockhart, Alpine, president; James F. Gipson, Fort Stockton, vice-president; Joel Wright, Alpine, secretary; and W. E. Lockhart and L. A. Lavanture, Marfa, delegates.

Smith County Society

February 7, 1946

Smith County Medical Society gave a banquet at the Blackstone Hotel, Tyler, on February 7, to honor Col. Floyd W. Hunter, commanding officer of the Camp Fannin Station Hospital. Appreciation was expressed to Colonel Hunter for furnishing outstanding medical officers for the society's monthly programs. Colonel Hunter is due to go on terminal leave shortly prior to retirement from the Army after thirty years of service. He told the society he hopes to make Tyler his home.

L. T. Neill, president of the society, presided at the banquet, with T. M. Jarmon acting as toastmaster. Dr. J. M. Travis, Jacksonville, and two Tyler city commissioners, the manager of the Chamber of Commerce, and other laymen were guests.

Tarrant County Society

March 5, 1946

(Reported by W. P. Higgins, Jr., Secretary)

Restoration of the Hand—J. R. Cochran.
Therapeutic Advances: Vitamin P—C. C. Garrett.

Tarrant County Medical Society met at the Medical Arts Auditorium in Fort Worth March 5, with sixty-two members present.

The scientific program outlined above was carried out. R. J. White, W. Burgess Sealy, J. W. Tottenham, Jr., and Harold J. Shelley discussed the paper by J. R. Cochran.

Tom B. Bond moved, seconded by L. O. Godley, that the committee on medical and hospital service be appointed by the president. The motion carried.

Dr. Godley, chairman of the public health advisory committee, made a report for that committee. It was moved by R. J. White that the society go on record as "favoring the moving of the V. D. Clinic from the present location to the grounds of the City-County Hospital." The motion was seconded and carried.

Upon motion by Dr. Bond, seconded by W. B. West, it was voted to recommend Dr. Fred Haggard for honorary membership in the State Medical Association through the Tarrant County Medical Society.

Frank Cohen, Zeno Holt, Charles E. Oswalt, Jr., and W. D. Marrs were elected to membership upon application.

J. B. Cummins, who after many years of service is still in active practice at the age of 88, was honored in a program under the direction of Dr. Godley, during which Dr. Cummins was presented a gift from the society as a token of appreciation for his service to the society and the community.

Tom Green Eight County Society

February 4, 1946

(Reported by R. M. Finks, Secretary)

Compound Fractures and Treatment in Osteomyelitis—Perry J. C. Byars.

Tom Green Eight County Medical Society met in the Indian Room of the Cactus Hotel February 4, with twenty-four members and guests present. W. Grady Mitchell, the president, presided.

M. D. Knight was elected to membership by transfer.

Perry J. C. Byars in his talk on compound fractures and treatment in osteomyelitis stressed the importance of careful debridement and irrigation of the wound by careful asepsis. He noted that sulfanilamide in the wounds is of no benefit and many times acts as a foreign body and prevents drainage, but that pencillin applied locally and given parenterally is beneficial. He advocated skin grafting in carefully selected cases.

March 6, 1946

Tom Green Eight County Medical Society met in San Angelo March 4. George A. Gray, of the Tom Green-San Angelo Health Unit, spoke on the value of health units. He explained that coöperation between the units and the medical profession is essential to efficiency and that since the health unit takes care of those persons unable to pay for medical care, thus removing any cause for socialization of the profession, such health units are the best preventives of the socialization of medicine.

Wilbarger County Society

February 13, 1946

Diagnosis and Treatment of Acute Disease of the Abdomen—Patrick P. T. Wu.

Wilbarger County Medical Society, with guests from surrounding Texas and Oklahoma cities, held a dinner meeting at the Canton Cafe in Vernon February 13 to hear Patrick P. T. Wu, Chinese physician now conducting postgraduate instruction

for practicing physicians in Oklahoma under sponsorship of the Oklahoma State Medical Association and the Oklahoma State Health Department. Nineteen were present.

Arrangements for the banquet at which Chinese food was served, were made by A. L. Borchardt, president, and Raymond Lemee, secretary-treasurer, of the county society.

AUXILIARY NOTES

Officers of the Woman's Auxiliary to the State Medical Association of Texas: President, Mrs. C. B. Alexander, San Antonio; President-Elect, Mrs. George Turner, El Paso; First Vice-President, Mrs. S. M. Hill, Dallas; Second Vice-President, Mrs. L. W. O. Janssen, Corpus Christi; Third Vice-President, Mrs. Troy A. Shafer, Harlingen; Fourth Vice-President, Mrs. Mark H. Latimer, Houston; Treasurer, Mrs. F. R. Rugeley, Wharton; Recording Secretary, Mrs. Paul H. Power, Waco; Corresponding Secretary, Mrs. Wilbur Robertson, San Antonio; Publicity Secretary, Mrs. E. L. Howard, Fort Worth; Parliamentarian, Mrs. W. R. Klingensmith, Amarillo.

AUXILIARY NEWS

Bell County Auxiliary met at the home of Mrs. J. E. Robinson, Temple, March 8 with forty-seven present. Dr. Sam Shibler, member of the Kings Daughters Hospital staff, spoke on "War Medicine."

Mrs. J. W. Pittman, Belton, president-elect, appointed committees for the year as follows: *year book*, Mesdames V. M. Longmire (chairman), Raleigh R. Curtis, W. A. Chernosky, and A. F. Wolf; *social*, Mesdames R. F. Bunkley (chairman), J. E. Robinson, J. G. Sewell, and L. R. Talley; *health and public relations*, Mesdames G. V. Brindley (chairman), F. P. Burow, M. C. Murphy, and P. M. Bassel; *telephone*, Mesdames W. N. Powell (chairman), O. B. Gober, R. M. Flett, and V. J. Simmon; *courtesy*, Mesdames P. M. Ramey, Terrell Speed, E. O. Bradfield, Bert DeBord, Jr., and Everett Veirs; *physical examination*, Mesdames R. K. Harlan (chairman), A. E. Moon, R. C. Curtis, and L. D. Stuart.

Members were urged to coöperate with the Red Cross drive.

Refreshments were served with Mrs. J. R. Winston, president, and Mrs. Frank Robinson, serving. Stock, forsythia, and yellow candles decorated the table.

Bexar County Auxiliary celebrated "Doctor's Day" March 8 with a luncheon honoring the doctors in the Tapestry Room of the St. Anthony Hotel, San Antonio, Dr. J. L. Cochran was speaker for the program, which was planned by Mrs. I. T. Cutter, program chairman. Mrs. Frank Steed, president, presided.

Bowie-Miller Counties Auxiliary assisted with a diagnostic cancer clinic in Texarkana February 15 at which approximately 100 persons were examined. Dr. Fred H. Hames, roentgenologist of Pine Bluff, Ark., who has conducted diagnostic clinics throughout Arkansas for five years, reported that the Texarkana clinic probably did more good to the community than any of the clinics he had previously conducted because a higher percentage of malignant cases (20 per cent) was found among those who came for examination.

Members of the auxiliary registered case histories of the patients, who were advised as to methods of treatment as soon as diagnosis of their individual cases was made. Also assisting were physicians from the medical society, representatives from the Miller County Health Unit, and a representative from the Negro division of the Bowie County Health Unit.

Childress-Collingsworth-Hall Counties Auxiliary met March 15 in the Childress Hotel, where dinner was served to the Auxiliary and the Medical Society. In the business meeting following dinner the auxiliary elected the following officers: Mrs. P. R. Jeter, Childress, president; Mrs. E. W. Jones, Wellington, first vice-president; Mrs. R. E. Clark, Memphis, second vice-president; and Mrs. S. H. Townsend, Childress, secretary-treasurer. It was decided to send donations to the Student Loan Fund, Memorial Fund, and George Plunkett Red Fund.—Mrs. J. A. Odom.

Ector-Midland-Martin-Howard-Andrews-Glasscock Counties Auxiliary entertained with a banquet for the Medical Society February 21 at the Scharbauer Hotel in Midland. Mrs. M. S. Dickerson and Mrs. A. J. Cooper, Midland, and Mrs. J. H. Barganier, Odessa, served as hostesses. Following the dinner, which carried out the George Washington motif, the auxiliary adjourned to the home of Mrs. Cooper for a program and business session.

Mrs. Dickerson introduced Mrs. E. L. Phillips, a guest, who reviewed the book "Sure Enough, How Come," by F. W. van Emden. The book good-naturedly points out the peculiarities of Texas speech.

Mrs. James H. Chapple, president, presided over the business session, at which time the auxiliary voted to contribute to the fund of the State Medical Association Library and also to subscribe to *Hygeia* for the high schools of Big Spring, Stanton, and Midland.

El Paso County Auxiliary was entertained by Mrs. Robert Homan, Jr., at a tea in her home February 11. Mrs. Irving McNiel reviewed J. Frank Dobie's book "A Texan in England" on a program arranged by Mrs. John Peticolas.

Guests were greeted by Mrs. George Turner, state president-elect. Mrs. R. B. Homan, Sr., honorary president, and Mrs. Robert Thompson, president of the El Paso Auxiliary, presided at the tea table, which was covered with a lace cloth and decorated with spring flowers and lighted tapers.

Harris County Auxiliary met March 25 at the home of Mrs. John B. Rushing, Houston, with George W. Cottingham, editor of the Houston *Chronicle*, as guest speaker. Mr. Cottingham spoke on current international affairs, and was introduced by Mrs. Lovel W. Raney.

Mrs. Frank Renfrow was chairman of the day with Mrs. Lucian Warner cochairman. Hostesses were Mesdames Lynn L. Bourdon, W. G. Bryan, C. P. Coogle, Cecil Crigler, John M. Filippone, Cecil Greer, Seale Johnson, and R. H. McMeane.—Mrs. Granville Q. Adams, Press Secretary.

Hunt-Rockwell-Rains Counties Auxiliary met February 5 at the home of Mrs. C. T. Kennedy, Greenville, with Mrs. C. T. Kennedy, Jr., and Mrs. H. W. Maier as cohostesses.

The following officers were elected: Mesdames W. P. Philips, president; J. W. Ward, first vice-president; Will Cantrell, second vice-president; Leslie Bush, third vice-president; E. Truett Crim, recording secretary; C. H. Roadman, corresponding secretary; M. L. Wilbanks, treasurer; C. T. Kennedy, parliamentarian; W. B. Reeves, historian; J. S. Cooper, publicity; B. F. Arnold and S. C. Whitten, delegates to the city federation; Bailey Birdsong and Benton Clark, alternates; W. P. Philips and B. F. Arnold, delegates to the state auxiliary; E. Truett Crim and T. C. Strickland, alternates.

Mrs. Benton Clark gave a devotional on the Lord's prayer. The auxiliary voted to give *Hygeia* subscriptions to the Carnegie Library and to four ward schools.

Refreshments were served.—Mrs. B. F. Arnold, president.

Lubbock-Crosby Auxiliary elected officers at a luncheon meeting at the Hilton Hotel, Lubbock, on February 12, with seventeen members and one guest

present. Mrs. Joseph R. Harris, Jr., was chosen president; Mrs. Martin H. Benson, vice-president; and Mrs. A. G. Barsh, secretary-treasurer.

Table decorations, in keeping with the date, carried out a patriotic theme, with flags, red, white, and blue candles, and greenery.

Washington County Auxiliary held a luncheon meeting at the Hotel St. Anthony, Brenham, on February 25. Mrs. W. F. Hasskarl, president-elect, presided in the absence of Mrs. C. E. Southern, president. The invocation was offered by Mrs. M. D. Burnett.

A letter of thanks for donations of books to McCloskey General Hospital at Temple was read, and plans for activities during the next few months were considered.

BOOK NOTES

[1]**Hay Fever Plants.** Their Appearance, Distribution, Time of Flowering, and their Role in Hayfever, with Special Reference to North America. By Roger P. Wodehouse, Ph. D., Associate Director of Research in Allergy, Lederle Laboratories, Pearl River, N. Y. Cloth, 245 pages. Price, $4.75. Waltham, Mass., Chronica Botanica Company, 1945.

This is a comprehensive book on hay fever botany and should be of interest and value to any one concerned with the subject of hay fever. The study of hay fever falls naturally into two fields, the clinical and the botanical, of which the latter is the more neglected and misunderstood. The purpose of this book is to interpret the botanical facts of hay fever in terms of their clinical significance. It is emphasized that not all plants cause hay fever and some have been wrongly suspected. The author has given a description of all the plants which are known to cause hay fever and some which are reasonably suspected, with special reference to those of particular importance in the various sections of the United States.

Chapter I is devoted to the Botany of Hay Fever. Pollination is accomplished either by insects, by the wind, or by both. The highly specialized insect pollinated flowers can be disregarded as causes of hay fever, but even wind-pollinated plants must have certain characteristics to be important factors in causing hay fever. These characteristics are the buoyancy, abundance, and allergenic toxicity of their particular pollen. To judge if a plant is likely to cause hay fever, one should know its mode of pollination. The allergenic toxicity of the pollen is limited to a relatively few families and most wind-pollinated plants are too scarce or shed too little pollen to be of much importance in hay fever.

Chapters II and III include descriptions of the various plants and their pollen, the plant distribution, and the mode and time of their pollination. In Chapter IV there is a compilation of a large number of regional hay fever surveys. The country is divided into ten sections. By means of description and tables the important hay fever plants in each section are outlined with their pollinating season and their comparative toxicity and importance from a hay fever standpoint.

There is an inclusive bibliography and also there are adequate indices. The book appears to be complete in every detail but comprises less than 250 pages.

VENEREAL DISEASE ABSTRACTS*

The Effect of Treated Acquired Syphilis in Life Expectancy. Dudley C. Smith and Martha C. Bruyere, Journal of Venereal Disease Information, Washington, 27:39-46 (Feb.) 1946.

It was found that the average life span of persons under routine therapy for syphilis was shorter than that of the uninfected persons, when the mortality in a general population was compared with the mortality in that portion of the same population that had been treated for syphilis.

Mortality data of the general population were supplied by the Bureau of Vital Statistics and data concerning the syphilitic portion of the population from the records of 2,908 syphilitic patients admitted to the University of Virginia Hospital, 15 to 75 years of age. It is important to note that practically all of the population considered was within an area where a venereal disease control program has been going on since 1920.

At age 30 the temporary life expectancy of white males to age 75 with syphilis was 5.5 years less than that of the general population at the same age, and that for Negro males to age 75 the decrease due to syphilis was 4.2 years, for white females to age 65, 4.9 years. Among Negro females to age 75 there was little difference, the loss being only one-half year.

Mortality Trends for Syphilis, Lida J. Usilton, Journal of Venereal Disease Information, Washington, 27:47-52 (Feb.) 1946.

That the syphilis death rates for the United States has steadily declined from 15.0 in 1939 to 12.1 in 1943, with every region contributing to the lowered rate, is indicated by mortality data compiled from Bureau of Census tabulations. The southern and western states experienced greater percentage decreases than did the northern states, but their 1939 rates were considerably higher.

In the study, separate investigations were made for death rates from syphilis in children under 1 year of age, paresis, and tabes dorsalis.

Data for the years back to 1933 are included in the investigation of congenital syphilis. From 1933 through 1943, there has been a marked decline in death rates from syphilis for infants under 1 year of age. The rate for the United States as a whole was less than one-third that in 1933, and this same trend was observed in every region of the country. The greatest decrease was noted in the northeastern states, from 0.52 in 1933 to 0.12 in 1943. Since 1938, the rates in the southern states have dropped precipitously, although there had been little change in the trend previously. The decline in infant mortality rates due to syphilis reflects not only improvement in general venereal disease control, but more specifically the prevention of occurrence of congenital syphilis through treatment of syphilis in women during pregnancy and the finding and treating of children under 1 year of age who have congenital syphilis.

Investigations of mortality due to paresis and tabes dorsalis include the years 1910 through 1943. The mortality rates per 100,000 population for paresis were highest in 1917. The upward trend flattened out from 1922 to 1923, and from 1923 to 1937 there was a constant downward trend. Malaria therapy for the treatment of paresis introduced in 1922 may have been largely responsible. The rates fell rapidly from 1923 to 1930, and then declined gradually until 1937. Since 1937, the rate has remained at approximately the same level, 3.0 to 3.5. For the states reporting since 1910, the rate fell from 7.55 in 1923 to 3.26 in 1937; for the expanding death-registration area, the respective rates were 6.59 and 3.23.

The mortality rates from tabes dorsalis has continuously decreased since 1910, with the rates for states reporting in 1910 being 2.66, and 0.57 for 1943; in the expanding area of death-registration,

[1]Reviewed by L. P. Hightower, M. D., Fort Worth, Texas.

*Abstracts of articles appearing in The Journal of Venereal Disease Information (formerly Venereal Disease Information) prepared by the Venereal Division, U. S. Public Health Service.

the rate fell from 2.66 to 0.47. The tendency toward a low constant rate seen in the data relating to paresis has not yet been observed in the tabetic death rates.

DEATHS*

Dr. Tom Green Curry died at his home in Franklin, Texas, January 15, 1946, of paralysis.

Dr. Curry was born near Kosse, Texas, December 31, 1866, the son of Tom Levi and Eliza (Ethridge) Curry. He attended the schools at Bremond and Kosse, and received his degree in medicine from the Kentucky School of Medicine, Louisville, in 1894. He practiced in Bremond one year, Wheelock twelve years, and Franklin for thirty-seven years. He was local surgeon for the Missouri Pacific Railway for thirty-seven years, and was county health officer for twelve years.

DR. TOM GREEN CURRY

For many years Dr. Curry was a member of the State Medical Association and American Medical Association through the Brazos-Robertson Counties Medical Society. He was a Mason.

Surviving Dr. Curry are his wife, the former Miss Virginia Calvert, whom he married October 29, 1891, in Bremond; three daughters, Mrs. Wilson H. Fox, Taylor; Mrs. L. L. Armor, Sweetwater; and Mrs. Raymond Schrock, Trenton, N. J.; two sons, Calvert Curry, San Angelo, and Joe L. Curry, Sweetwater; three brothers, Dr. Hardy Curry and Duke Curry, Marlin, and A. F. Curry, Plainview; and one sister, Mrs. J. W. Cooper, Kosse.

Dr. Adair W. White, of Houston, Texas, died February 17, 1946, in a Houston hospital of carcinoma of the liver.

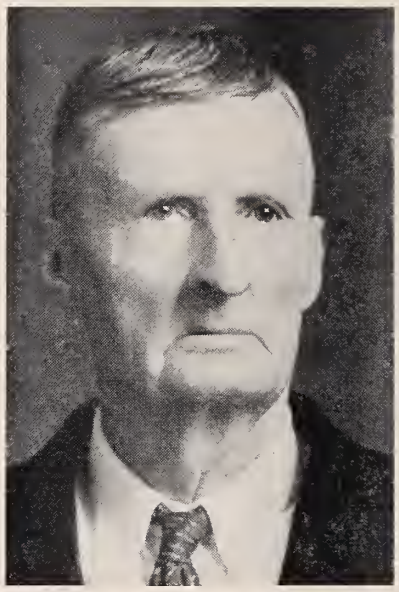
The son of Dr. George C. and Georgianne White, Dr. White was born August 1, 1889, in Oakland, Ky. He was graduated from Ogden College in Bowling Green, Ky., and then received his medical education at the University of Louisville, obtaining his degree in 1916. He served an internship and a one-year residency at Memorial Hospital, Houston, and remained in Houston to practice for twenty-six years, being in active practice there until his death with the exception of the World War 1 period when he served as a captain in the Medical Corps of the Army. He had been a visitant in obstetrics at Jefferson Davis Hospital for twenty years, was chairman of the intern committee at the same hospital, and was a member of the staff at Memorial Hospital.

Since 1922 Dr. White had been a member of the State Medical Association and American Medical Association through the Harris County Medical Society. He was also a member of the Southern Medical Association, South Texas District Medical Society, and Houston Academy of Medicine. He was a member of Phi Beta Pi medical fraternity, Christian Church, Knights Templar, Shrine, and a thirty-second degree Mason.

Dr. White is survived by his wife, the former Miss Madeline Adair Bleeker, whom he married January 24, 1923; a son, Adair Wayne White, Jr., now a student at Johns Hopkins University School of Medicine; two sisters, Mrs. Walter Petty, Denver, Colo., and Mrs. Lee Thomas, Bowling Green, Ky.; and four brothers, Dr. L. C. White, Adair, Okla.; Milton White, Hugh White, and Roy White, all of Indianapolis, Ind.

Dr. John Housand Bush Jones, Petrolia, Texas, died of pneumonia at his home December 28, 1945.

Son of William and Sarah Jones, Dr. Jones was born July 1, 1867, at Rockwall, Texas. He attended the schools at Belknap and received his medical education at Fort Worth Medical College. After serving an internship at Belknap Hospital, he practiced for short periods in Newcastle, Byers, Wichita Falls, and Burkburnett before locating in Petrolia, where he practiced thirty years. For some years Dr. Jones was a member of the State Medical Association and American Medical Association, first through Clay County and then through Wichita County Medical Society. He was a member of the Methodist Church and Odd Fellows.



DR. JOHN H. B. JONES

Surviving Dr. Jones are his wife, the former Mrs. Viola Sanders, whom he married at Henrietta June 28, 1924; three sons, John Jones, Nolan Wayne Jones, and Kenneth Ray Jones, all of Petrolia; one daughter, Mrs. J. C. McCarn, Nocona; and a stepdaughter, Mrs. E. L. Thornton, Las Vegas, Nev.

Dr. Joseph Henry Graves, Houston, died in the Veterans Hospital in Dallas, February 22, 1946.

Dr. Graves was the son of George W. and Mary (Fowler) Graves and was born October 20, 1874, at Springfield, Texas. He received his academic education at Southwestern University, Georgetown, and obtained his degree in medicine from the University of Texas School of Medicine, Galveston, in 1912. After serving an internship at John Sealy Hospital, Galveston, Dr. Graves opened practice in Waco, where he also lectured to nurses classes at Providence Hospital. He had served in the Spanish-American War and was with General John J. Pershing on the expedition into Mexico in 1916-1917, as well as serving during the first World War. In 1922 Dr. Graves went to Houston, where he practiced until ill health forced his retirement in 1943.

Throughout his professional career, Dr. Graves

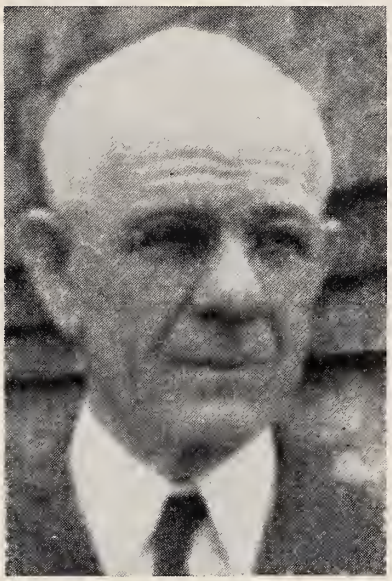
*An obituary ordinarily will not be published more than four months after date of death. Cooperation in reporting deaths of physicians and in furnishing appropriate biographical material promptly is solicited.

was a member of the State Medical Association and American Medical Association, first through the McLennan County Medical Society and later through Harris County Medical Society. He was a member of the Post Graduate Medical Assembly of South Texas and the Houston Academy of Medicine. He was a member of the American Legion, surgeon for Forty and Eight, a member of United Spanish War Veterans, Masonic order, Knights of Pythias, and past chancellor commander of Knights of Pythias.

Survivors include Dr. Graves' mother, Mrs. George W. Graves, Sr., and two sisters, Miss Minnie B. Graves and Mrs. C. W. Stevenson, all of Waco; and six brothers, Dr. Marvin L. Graves, Judge George W. Graves, Dr. Ralf A. Graves, and Pleasant F. Graves, all of Houston; E. F. Graves, Waco, and T. N. Graves, Augusta, Ga.

Dr. Olin Farris Gober, Temple, Texas, died of coronary sclerosis and arteriosclerosis January 26, 1946, in the Santa Fe Hospital there, which he had served as chief physician for many years.

Born April 14, 1878, in Jackson County, Ga., Dr. Gober was the son of Levi Harrison and Amanda R. Gober. He attended the schools at Harmony Grove, Ga., and obtained further academic education at Sam Houston State Normal College, Huntsville, Texas, and Baylor University, Waco, before entering the University of Texas School of Medicine, from which he was graduated in 1905. He interned at John Sealy Hospital, Galveston, and then moved to Temple, where he resided the rest of his life. Since 1917 Dr. Gober had been chief physician for the Gulf Coast and Santa Fe Railway and for the Santa Fe Hospital in Temple. He was also associated with Scott and White Hospital and carried on a private practice.



DR. OLIN FARRIS GOBER

Throughout his professional career Dr. Gober was a member of the Bell County Medical Society, State Medical Association, and American Medical Association. He was a Fellow of the American College of Physicians. He served the State Medical Association as vice-president in 1935; and as secretary in 1911, 1917, and 1942, and chairman in 1930 of the Section on Medicine and Diseases of Children. At the time of his death he was serving as a member of the Legislative Committee of the State Medical Association. He was a member of the Twelfth District Medical Society, the Southern Medical Association, and Texas Railway Surgeons Association, serving the latter organization as president for one term. He was also a past president of the University of Texas Medical School Alumni Association. He was on the Temple school board from 1922 until 1928, serving as president from 1923 until 1928; a charter member and past president of the Lions Club; a Mason and Shriner; and a city alderman for Temple in the early twenties, at which time he was active in initiating a charter change which resulted in the present commission-city manager form of government in Temple. During both world wars Dr. Gober participated actively in war loan, Red Cross, and similar drives.

Dr. Gober married Miss Mary Burr in Temple in 1907. She preceded him in death September 4, 1944. He is survived by one son, Dr. Olin B. Gober, and one grandson, Brian Gober, Temple; two sisters, Mrs. R. M. Cantey, Sarasota, Fla., and Mrs. P. B. Trawick, Commerce, Ga.; and a brother, L. T. Gober, Brownwood.

Dr. Thomas Carlton Honea died at his home in Cleburne, Texas, January 11, 1946.

The son of Mr. and Mrs. T. J. Honea, Dr. Honea was born September 25, 1883, in Cleburne, where he attended the public schools. He received his academic degree from Texas Christian University and his medical degree from the University of Tennessee in 1909. He served an internship at the T. E. Schumpert Memorial Hospital in Shreveport, La., and later did postgraduate work at Bellevue Hospital, New York, the University of California, and Tulane University. He began practicing in Cleburne in 1911, and after six years of general practice he specialized in eye, ear, nose, and throat.

DR. THOMAS CARLTON HONEA

Dr. Honea had been commissioned a captain in the Texas National Guard in 1922, and promoted to a majority in 1929. In November, 1940, he was called to active duty. After serving at Camp Bowie, Texas, and Fort Sill, Okla., he was transferred to Camp Maxey, Texas, where he was hospital inspector from September, 1942, until placed on terminal leave shortly before his death. He had been made a full colonel in December, 1945.

Throughout his professional career Dr. Honea had been a member of the Johnson County Medical Society, State Medical Association, and American Medical Association. He was a member of the Church of Christ and was superintendent of the local Sunday School for many years. He was a charter member of the Cleburne Rotary Club and was its first president.

Dr. Honea married Miss Rose Arnold in Cleburne, October 26, 1922. He is survived by his wife; a daughter, Marion Honea, Cleburne; two brothers, C. E. Honea, Cleburne, and M. L. Honea, Lockney; and four sisters, Mrs. Pearl McDonald, Mrs. W. R. Hopkins, and Mrs. Chester Beardsley, all of Cleburne, and Mrs. J. Honea, Randle, Austin.

Dr. Ernest Albert Hancock, Ranger, Texas, died December 5, 1945, of a heart attack at his home.

Born December 21, 1866, in Indianapolis, Ind., Dr. Hancock was the son of Albert R. and Dela Hancock. He was graduated from the Bennett College

of Eclectic Medicine and Surgery, Chicago, in 1881, and served an internship in a Chicago hospital. Dr. Hancock practiced for short periods in Binghamton, N. Y.; Chicago, Denver, Los Angeles, and Dallas before locating in Stephens County, Texas, where he was active for about fifty years in and near Ranger. Between 1924 and 1938 Dr. Hancock was a member of the State Medical Association and American Medical Association through the Stephens and Stephens-Shackelford Counties Medical Societies. He was a member of the Christian Church and had served during World War 1. He had been surgeon for an accident company in Chicago and a mine surgeon at Rock Creek, Texas.

Dr. Hancock married Miss Mary M. Murer in Colorado Springs, Colo., July 2, 1891. He is survived by his wife; a daughter, Mrs. Louise Harman, Washington, D. C.; and three sisters, Mrs. Mabel Wells, Denver; Mrs. J. T. DeVore, El Centro, Calif., and Mrs. Frank L. Harvey, Monterey Park, Calif.

Dr. **Joseph Henry Loving**, of Wellington, Texas, died at his home February 9, 1946, of coronary thrombosis.

Dr. Loving, the son of John and Minerva (Hamilton) Loving, was born May 21, 1862, in Missouri, but his family moved to Texas shortly thereafter, and he attended the public schools near Rockwall. After teaching school to earn money, he entered the University of Tennessee Medical School at Nashville, remaining long enough to obtain a certificate to practice medicine for two years. He returned to Fate, Texas, and practiced for that length of time, then re-entered the Medical School to complete his course. In 1890 he received his degree in medicine and also a diploma in dentistry. In later years Dr. Loving did postgraduate work in New Orleans and Chicago, specializing in eye, ear, nose, and throat. Following graduation, Dr. Loving went back to Fate to practice for nine years before moving to what is now Blair, Okla. In 1906 he returned to Texas, settling in Wellington. He spent ten years in the milder climate of Falfurrias following his almost complete retirement from practice in 1928, but eight years ago he returned to Wellington to live. Although he had retired from active practice, Dr. Loving continued to test eyes and fit glasses until he was 82 years old.

DR. JOSEPH HENRY LOVING

For some years Dr. Loving was a member of the State Medical Association and American Medical Association through the Childress-Collingsworth-Donley-Hall Counties Medical Society.

Dr. Loving married Miss Annie M. Porter, of Fate, in 1883. She preceded him in death in 1910. He was married in 1917 to Miss Abbie L. Owens, of Wellington. He is survived by eleven children: Thomas B. Loving, Mrs. Pearl N. Shaw, Mrs. Otto Buegger, Porter E. Loving, O. K. Loving, and Mrs. C. A. Harrell, Wellington; Mrs. Opal Sims, Dallas; Mrs. Philip Welfield and Miss Mary Ann Loving, Amarillo; Joseph H. Loving, Jr., Los Angeles, Calif.; and Mrs. Etta Belle Williams, Doris, Calif. Also surviving are two sisters: Mrs. E. L. Stevenson, Abilene, and Mrs. R. B. Mayfield, Blair, Okla. Four children preceded Dr. Loving in death.

Dr. **Edwin T. Morris**, San Benito, Texas, died November 25, 1945, in a Harlingen hospital of congestive heart failure.

Dr. Morris was born at Bastrop February 12, 1887, the son of A. T. and Mabel (Hutchinson) Morris. He was graduated from the Bastrop High School and attended Baylor University two years before entering the University of Texas School of Medicine, where he received his medical degree in 1912. He served an internship at Scott and White Hospital, Temple, also serving at the Santa Fe Hospital at Temple under the supervision of the Scott and White staff. Dr. Morris did postgraduate work in New York. About 1915 Dr. Morris began practicing at Del Valle, in Travis County, remaining there until called to active service in World War 1. He was commissioned a first lieutenant in the Medical Corps of the Army in 1917 and was stationed at San Benito, where he served until discharged in 1920. He remained in San Benito, practicing medicine and surgery until his death. For years Dr. Morris was on the staff of Valley Baptist Hospital, Harlingen, and was on the courtesy staff until his death.

DR. EDWIN T. MORRIS

Throughout his professional life Dr. Morris was a member of the State Medical Association and American Medical Association, first through the Travis County Medical Society, then through the Cameron County Medical Society, and, after its organization, through the Cameron-Willacy Counties Medical Society. For many years he was local surgeon for the Missouri Pacific railroad. He was a member of the Baptist Church. He was a charter member of the San Benito Kiwanis Club, which he helped organize and which he served as president in 1936, a thirty-second degree Mason, a member of the Shrine, and of the American Legion. He was on the medical advisory board for the proposed San Benito Hospital and was a stockholder and director of the Rio Grande Building and Loan Company.

Dr. Morris on July 11, 1917, married Miss Lois Saunders, of San Marcos, who survives. He is also survived by two brothers, Earl L. Morris, Bastrop, and Jesse Morris, of South America.

The San Benito Kiwanis Club, the San Benito lodge of Elks, and the San Benito Business and Professional Women's Club have passed resolutions in memory of Dr. Morris and his contributions to the community.

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CONTENTS

EDITORIALS—
State Medical Association Administration 1
Present Status of Cult, Medical and Public Health Legislation 1
The Seventh War Loan Drive 2
Our Membership on May First This Year 2
New Film for Motion Picture Library 3
Additional Donations to Library Endowment Fund 3
Current Editorial Comment
Preparation of Potent Rh Antiserum 3
Treatment of Virus Diseases 4
ORIGINAL ARTICLES—
The Care of the Premature Infant From An Obstetrical Standpoint.
Robert A. Johnston 5
Lobectomy and Pneumonectomy for Pulmonary Tuberculosis.
Albert O. Singleton and Maynard D. Knight 10
Carcinoma of the Vulva.
O. W. English and E. L. Hunt 16
Diverticulitis of the Colon.
Jack G. Kerr 18
Facts That Should Be Known About Allergy.
J. H. Black 21
Feeding Trends in Pediatrics.
P. E. Luecke 24
The Use of Barbiturates in Obstetrics.
Roy L. Grogan 28
Intra-Ocular Melanoma.
C. P. Schenck 31
Practical Public Health Procedures in the Control of Some of the More Common Communicable Diseases.
E. W. Prothro 35
Malignant Epithelial Tumors in Young Age Groups.
A. J. Gill and C. T. Ashworth 39
MISCELLANEOUS—
Coming Meetings and Clinics 41
Hospitals Needing Interns and Residents 41
American College of Chest Physicians Examinations 41
Board of Ophthalmology Examinations 41
Library Notes 42
Motion Picture Lending Library 42
News 43
Society News 45
AUXILIARY NOTES—
Auxiliary News 51
Book Notes 51
Deaths 52
Advertisers' Index 56

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CONTENTS

EDITORIALS Page
- The Galveston Annual Session 619
- Not Too Late to Pay Dues 622
- County Medical Society Library Building Fund 622
- Volume XLI Closes 624
- Dr. R. B. Anderson Ill 624

Current Editorial Comment
- Congenital Heart Disease 624

ORIGINAL ARTICLES—
- The Future of the Texas Medical Center. *E. W. Bertner* 625
- Hay Fever—Fact and Fiction. *Paul D. Fleming* 628
- Field Practice in Preventive Medicine for Medical Students. *Carl U. Dernehl* and *Carl A. Nau* 632
- Galveston Extends a Welcome. *Lillian E. Herz* 636

PROGRAM AND ANNOUNCEMENTS—
- State Medical Association 641
- Texas Railway and Traumatic Surgical Association 659
- Texas State Heart Association 660
- Texas Neuropsychiatric Association 660
- Texas Society of Gastro-Enterologists and Proctologists 660
- Texas Association of Medical Anesthetists 660
- Texas Chapter, American College of Chest Physicians 661
- Conference of City and County Health Officers 661
- Woman's Auxiliary 661

MISCELLANEOUS—
- Medical Officers Returning to Texas 664
- Coming Meetings and Clinics 665
- Hospitals Needing Interns and Residents 665
- Texas Society for Mental Hygiene 665
- Texas Club of Internists 666
- New Films for the Library 667
- Transactions of Executive Council of State Medical Association 670

Library Notes 674
- Motion Picture Lending Library 674

News 675
Society News 678

AUXILIARY NOTES—
- Auxiliary News 684

Book Notes 685
Deaths 686

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President, DR. H. F. CONNALLY, Waco. **President-Elect, DR. C. C. COLE, Harlingen**
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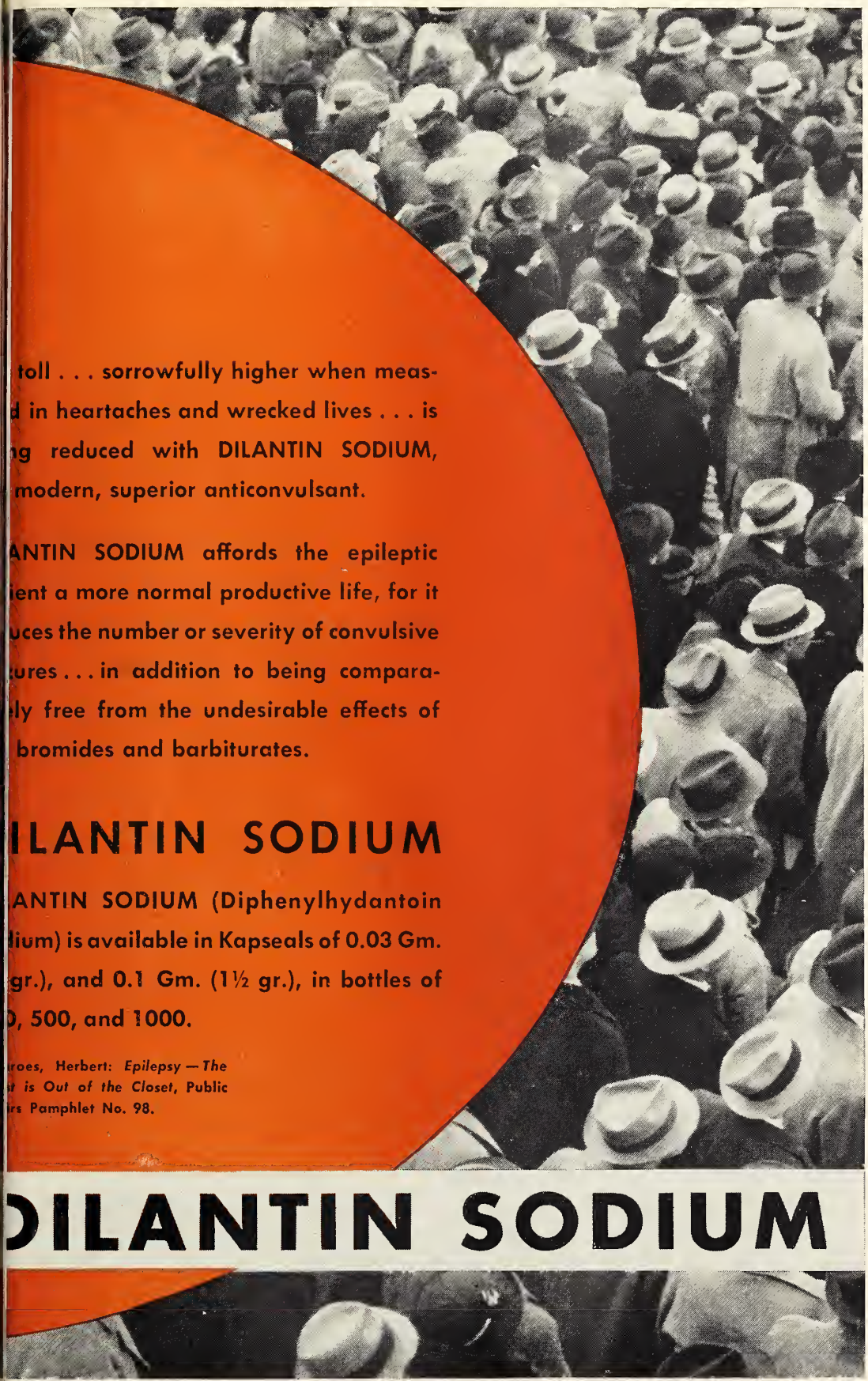

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